

Thursday, July 3, 2014

Dan Buckshi, Chief Administrative Officer  
County of San Luis Obispo  
County Government Center  
1055 Monterey Street  
San Luis Obispo CA 93408

RE: COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT  
DECLARATION OF SURPLUS WATER

Dear Dan:

On behalf of the Zone 3 agencies, we want to express our sincere appreciation for the time and effort that you took to meet on Wednesday, June 18, 2014 regarding the Lopez reservoir Surplus Water declaration for the 2014/2015 Water year. As you could see from our passionate discussion, this matter is critically important to us and we consider Lopez Surplus water to be an important water supply resource that we intend to protect. We also wish to acknowledge and compliment County staff for their previous cooperation with the Agency representatives on the management of the Zone 3 Flood Control District. It's with this historical backdrop of teamwork that we feel confident that we will be able work through our current and future water supply challenges.

First of all, the Zone 3 agencies are requesting that the County declare Surplus water as required by the Contract, either by the previous authority provided in 2010 by the Board of Supervisors, or by taking a recommendation of the declaration to the Board of Supervisors in the next month. Time is of the essence and we recommend that this matter be resolved as soon as possible. The request to declare Surplus Water is not taken lightly and we recognize the inherent conflict of declaring "Surplus Water" in the midst of a significant drought, particularly in light of the previous Drought Declaration by the Board of Supervisors. However, this water is not "surplus" by the true definition of the word, but rather "Carryover" water that was not used in the previous water year.

As previously expressed, our recommendation for the declaration is based on multiple factors that take into consideration all available water supply conditions for the Zone 3 agencies. These factors include the current poor health of the groundwater basin, the significant potential for long-term damage to the groundwater basin if accelerated pumping occurs, the 5% delivery of State Water and the fact that mechanisms are already in place to deal with low reservoir levels. Considering these and other conditions, and after lengthy discussion and deliberation, the Surplus water declaration has been recommended to the County in writing by the following stakeholders:

- |   |                |
|---|----------------|
| 1. Northern Cities Management Area Technical Group- | March 21, 2014 |
| 2. City of Grover Beach City Council-               | May 7, 2014    |
| 3. Zone 3 Technical Advisory Committee-             | May 8, 2014    |
| 4. City of Pismo Beach City Council-                | May 23, 2014   |
| 5. City of Arroyo Grande City Council-              | May 28, 2014   |

Copies of the letters from these stakeholders are attached. In addition, the Zone 3 Advisory Committee voted on May 15, 2014 to recommended approval of the declaration and release of Lopez Surplus water in an amount not less than 2,700 AF.

The Zone 3 agencies do recognize the potential impacts of continued drought conditions and have already committed to aggressive water conservation measures and water use contingency planning efforts. Since we are the recipients of water from the Lopez Reservoir, we have the most at stake to ensure that water in the reservoir is managed wisely. To that end, we have committed to several near-term strategic initiatives to coordinate the effective use of all of our available water resources. In particular we have already started work on the following initiatives that will be completed by August 31, 2014:

- Low Reservoir Response Plan (in cooperation with County staff)
- Reservoir Delivery Model Options and potential contract revision list for future discussion

It is proposed to utilize the results of the Low Reservoir Response Plan and Reservoir Delivery Model Options as the basis for developing recommendations to address potential modifications in how Lopez Lake surplus water is allocated and/or delivered in the future. Representatives from each of the Zone 3 and NCMA agencies will commit to participating in a process with County staff to identify and agree on recommended changes. The process will include review and negotiation of potential amendments to the existing Water Supply Contract between the agencies and the San Luis Obispo County Flood Control and Water Conservation District. The primary intent will be to identify changes designed to manage the Lopez Lake water supply in the most long-term responsible manner while balancing overall water supply needs of the agencies and other stakeholders. It will also be the intent to clarify specific procedures and guidelines on how entitlement and surplus water is provided during both normal and drought periods in the future to avoid conflicts and to accommodate effective long-range water supply planning activities.

The Zone 3 and NCMA agencies recognize and support the need to work in cooperation with the County to manage this water resource effectively. The following steps are proposed to ensure this process is completed in the time necessary to implement the results for the next water year:

July 22, 2014	Surplus Water declaration for the 2014/2015 Water Year (Retro-active to April 1, 2014)
July 24, 2014	Reservoir Delivery Model Options outlined and sent to County staff
July 31, 2014	Low Reservoir Release Plan (LRRP) administrative draft prepared
August 7, 2014	Zone 3 Technical Advisory Committee review of LRRP and Reservoir Delivery Model Options
Sept. 18, 2014	Zone 3 Advisory Committee review/ approval of LRRP and Reservoir Deliver Model Options

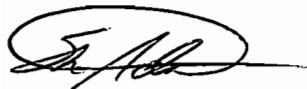
In addition, the Zone 3/ NCMA Agencies have separately implemented aggressive municipal water conservation programs (see the attached program information) and begun work on a critically important Water Shortage Contingency Plan, drought response measures and other initiatives listed below that will help guide decision making should the current drought conditions continue. This water planning initiatives include the following:

- Water Shortage Contingency Plan
- Five Cities Water Summit coordination
- NCMA FY 14/15 Water Supply, Production & Delivery plan
- Regional Recycled Water Strategic Plan
- Santa Maria Groundwater Characterization

A timeline of the Zone 3/ NCMA Near-term Strategic Initiatives is attached. As you can see, we are committed to collaborative water use planning efforts and recognize that continued regional cooperation is crucial. The declaration and release of Surplus water is one of the tools that we collectively agreed to through this collaborative process is in the best interest of the agency members.

We hope that you take our request for the declaration and release of Surplus water under serious consideration. We respectfully request a response as to your intentions by Wednesday, July 16, 2014. Should you have any questions or need additional information, please let us know.

Sincerely:



Steve Adams  
City Manager,  
Arroyo Grande



Bob Perrault  
City Manager,  
Grover Beach



Jim Lewis  
City Manager,  
Pismo Beach

C: Zone 3 Technical Advisory Committee

**Attachments:**

1. Recommendation to declare Surplus Water: Northern Cities Management Authority
2. Recommendation to declare Surplus Water: City of Grover Beach City Council
3. Recommendation to declare Surplus Water: Zone 3 Technical Advisory Committee
4. Recommendation to declare Surplus Water: City of Pismo Beach City Council
5. Recommendation to declare Surplus Water: City of Arroyo Grande City Council
6. Zone 3/ NCMA Near-term Strategic Initiatives Timeline
7. City Council Report: Water Conservation and Declaration- City of Pismo Beach
8. City Council Report: Declaration of Water Shortage- City of Grover Beach
9. City Council Report: Water Supply and Conservation- City of Arroyo Grande

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May 8, 2014

John Diodati  
Zone 3 Advisory Committee Secretary  
Room D-430, County Government Center  
San Luis Obispo, CA 93408

SUBJECT: San Luis Obispo County Flood Control and Water Conservation District Zone 3– Declaration of Surplus Water

Dear Mr. Diodati,

The San Luis Obispo County Flood Control and Water Conservation District (District) Zone 3 Technical Advisory Committee (Zone 3 TAC) prepared this letter to request the Zone 3 Advisory Committee (Advisory Committee) submit a recommendation for the District Board of Supervisors to declare Lopez Surplus Water for water year 2014-15.

Surplus water for the Lopez Project is a critical source of supply and a drought-planning tool that the Zone 3 contracting agencies utilize to manage their water supplies. During wet years, the contracting agencies are able to store surplus water in the reservoir for future use to help relieve drought conditions or protect their other sources of supply, including protection of our groundwater basin from potential sea water intrusion. The name "surplus water" is misleading and does not provide an accurate description for how surplus water is derived or its origin. It would be beneficial to rename surplus water to "carry-over entitlement and unused down-stream release" to more accurately describe what it represents and where it comes from.

The mechanism for declaring surplus water is clearly spelled out in the Water Supply Contracts between the contracting agencies and the District. According to Article 4. Distribution and Sale of Project Water subparagraph (D) the amount of Surplus Water available to the contracting agencies is determined annually using the following calculation:

"Surplus Water shall be calculated for each Water Year by subtracting from the Safe Yield of the Project an amount equal to the sum of the quantity of water released downstream during the immediately prior Water Year, which shall not exceed 4,200 acre feet unless legally required by Article 4(A) hereof, and the quantity of Entitlement water delivered to the Agency and the Other Agencies during the immediately prior Water Year, excluding downstream releases and Entitlement deliveries that occurred during the period of time that the District determined that continuous spillway flow was occurring at Lopez Dam."

Applying this calculation to Lopez water year 2013-14, only 6,588 AF of Lopez Entitlement and downstream release water was released out of the identified safe yield of 8,730 AF, therefore 2,142 AF of surplus water is available for distribution to the contracting agencies. There are no provisions in the contract for Surplus water to be restricted or withheld from being released. Article 5. Subparagraph (C) contains provisions that allow the District to restrict deliveries if there are extreme long-term meteorological patterns that reduce the safe yield assumptions for the project. However, at this point it is the opinion of the TAC that these conditions do not currently exist.

The Lopez Reservoir is currently above 50% capacity and at current release rates there are at least two more years of water supply available and the potential to extend releases beyond that through the implementation of the Low Level Release Plan. The Low Level Release Plan is triggered if the amount of water within the Reservoir drops below 20,000 AF, as measured on April 1<sup>st</sup> of any given year. Lake levels in 2014 were well above the trigger and it is anticipated that the Low Level Release Plan trigger will not be reached in 2015 either.

In addition, to the justifications stated above, Zone 3 agencies have been using declared "carry-over entitlement and unused down-stream release" to reduce groundwater pumping in the ground water basin as the recent drought has resulted in groundwater levels that are declining. Use of available surface water is a significant tool in our effort to minimize groundwater pumping.

Given these conditions, the Zone 3 TAC requests that the Advisory Committee submit a recommendation for the District Board of Supervisors to declare Lopez Surplus Water for water year 2014-15.

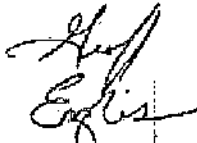
Sincerely,  
Zone 3 TAC



Benjamin Fine  
Public Works  
Director/City Engineer  
City of Pismo Beach



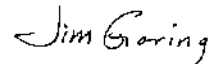
Gregory Ray  
Public Works  
Director/City Engineer  
City of Grover Beach



Geoff English  
Director of Public Works  
City of Arroyo Grande



John Wallace  
Engineer  
CSA 12



Jim Garing  
Member at Large

March 21, 2014

Paavo Ogren  
 Director of Public Works  
 San Luis Obispo County  
 County Government Center, Room 207  
 San Luis Obispo, CA 93408

**SUBJECT:** San Luis Obispo County Flood Control and Water Conservation District Zone 3— Declaration of Surplus Water

Dear Mr. Ogren,

The Northern Cities Management Area Technical Group (NCMA TG) prepared this letter to request that the San Luis Obispo County Flood Control and Water Conservation District (SLOCFC&WCD) staff include in their presentation to the SLOCFC&WCD Board of Supervisors a recommendation to declare Lopez surplus water for water year 2014-15.

Lopez Project water, along with water from the State Water Project (SWP) and the Northern Cities Management Area (NCMA) of the Santa Maria Groundwater Basin (SMGB), are the three primary sources of water that supply the Oceano Community Services District (OCSD) and the Cities of Arroyo Grande, Grover Beach and Pismo Beach (Northern Cities). For years, the Northern Cities have worked collaboratively to balance their usage of each these sources of supply to help maintain the long-term sustainability of their water supply portfolio.

In 2009, in response to detecting water quality constituents consistent with seawater intrusion in one of their coastal groundwater monitoring wells (sentry wells), the Northern Cities formed the NCMA Technical Group (NCMA TG). The NCMA TG, which consists of technical staff from each of the Northern Cities, identified seawater intrusion into the SMGB as a threat to the Northern Cities' water supply and took immediate steps to conserve water, reduce pumping and increase surface water imports. These actions along with availability of surplus water from Lopez Reservoir and wetter hydrologic conditions allowed groundwater levels in the NCMA to recover, forcing the seawater wedge offshore. However, with the recent drought, groundwater levels have again declined and the Northern Cities' key well index, an average of the water level in the three sentry wells identified as most representative of groundwater basin's production zone, has dropped below the trigger level identified by the Northern Cities for creating conditions that could lead to seawater intrusion. Additional information on the Northern Cities Key Well Index is provided in the attached 2013 NCMA Annual Report.

To address the re-occurring threat of seawater intrusion, the Northern Cities are currently pursuing two key strategic initiatives to improve the reliability of their water supplies. These initiatives include:

- Characterization of the groundwater basin and the development of a groundwater model to better understand the geology and hydrogeology of the NCMA; and
- The development of a recycled water project that could be utilized to improve water supply reliability by offsetting potable water demands and/or recharging the groundwater basin.

However, to help prevent future occurrences of seawater intrusion in the near-term, the Northern Cities believe that it is critically important to utilize a strategy of water conservation and continued use of all available surface water supplies (i.e. Lopez Entitlement, Lopez Surplus, and SWP water) to limit groundwater pumping within the basin.

As you are well aware, the California Department of Water Resources SWP Table A Allocation is set at 5% for 2014, thus limiting the availability of imported surface water. Consequently, the Northern Cities are increasingly dependent upon water from the Lopez Project to protect their groundwater basin. Without the availability of surplus Lopez water, the Northern Cities will lose their flexibility to manage their water supplies and will be forced to increase their groundwater pumping by potentially as much as 2,327 AF in 2014.

The Northern Cities understand the need to conserve water in the eventuality that 2015 is another dry year, and that a balance must be struck between using surface and groundwater supplies. However, due to difficulty in combating seawater intrusion once it has occurred, the NCMA TG believes that it is critically important to utilize available surface water to offset groundwater pumping and protect the groundwater basin. Therefore, the NCMA TG requests that the SLOCFC&WCD staff include in their presentation to the SLOCFC&WCD Board of Supervisors a recommendation to declare Lopez surplus water for water year 2014-15.

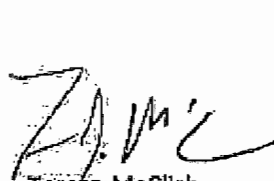
Sincerely,  
Northern Cities Management Area Technical Group



Benjamin Fine  
Public Works  
Director/City Engineer  
City of Pismo Beach



Gregory Ray  
Public Works  
Director/City Engineer  
City of Grover Beach



Teresa McClish  
Director of Community  
Development  
City of Arroyo Grande

Attached: 2013 NCMA Annual Report



# City of Grover Beach

Mayor Debbie Peterson

Mayor Pro Tem Jeff Lee

Council Member Karen Bright, Council Member Glenn Marshall, Council Member Bill Nicolls

Robert Perrault  
City Manager

May 7, 2014

Bruce Gibson, Chair, and Supervisors  
San Luis Obispo County Board of Supervisors and  
Directors, San Luis Obispo County Flood Control and Water Conservation District  
Room D-430, County Government Center  
San Luis Obispo, CA 93408

**SUBJECT: COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT -  
DECLARATION OF SURPLUS WATER**

Dear Chair Gibson, Supervisors, and Members of the Board:

I am writing on behalf of the Grover Beach City Council to urge the District to undertake and complete the process of declaring surplus water availability at Lopez Lake in compliance with the provisions of the Water Supply Contract that exists between the District and the City of Grover Beach.

The City receives its water supply from Lopez Lake and the Santa Maria Ground Water Basin. Since its construction, the City has relied on Lopez Lake and its treatment facility to supply approximately 36% of the City's water needs through the regular allocation under the contract. In recent years, the City has also used the surplus water which first became available as the result of the heavy rain events beginning in 2010 to make the best use of our combined water sources.

It is our understanding that District staff will for the first time in contract history be seeking Board guidance in determining the existence of surplus water. According to Article 4. Distribution and Sale of Project Water subparagraphs (C) and (D) the amount of Surplus Water available annually is determined by a mathematical calculation performed by the District. This calculation is based on the calculation of the amount of water that exists over and above the lake's safe yield following the close of a water year. The safe yield consists of up to 4,200 acre feet made available for downstream release and the total of 4,530 acre feet of project water that is to be distributed to the contract agencies, including Grover Beach. The safe yield totals 8,730 acre feet of water. Any unused project water is then placed in a pool and made available to the contracting agencies on a proportionate share basis as surplus water. As noted in the agreement, the determination of the existence of surplus water is based on the completion of the process and is not discretionary.

Since 2011 Grover Beach, along with the other member agencies, have been managing our Lopez water supply by utilizing the declared surplus first, before using our entitlements. We have each intentionally preserved an amount of entitlement water each year so that it can be carried over to be declared as surplus in the next year and then used as part of that year's supply. In light of the current drought conditions, the City may also use the surplus in the coming year to offset the demand on the ground water basin and limit the potential for salt water intrusion.

154 South Eighth Street ♦ Grover Beach, California 93433 ♦ FAX (805) 489-9657 ♦ [www.grover.org](http://www.grover.org)

Administrative Services/Water (805) 473-4550 ♦ City Council/City Manager (805) 473-4567 ♦ City Clerk (805) 473-4568  
Community Development - Building, Planning & Economic Development (805) 473-4520 ♦ Human Resources (805) 473-4564  
Parks & Recreation (805) 473-4580 ♦ Police/Non-Emergency (805) 473-4511 ♦ Public Works (805) 473-4520



*Subject: County Flood Control and Water Conservation District Declaration of Surplus Water*

*May 7, 2014*

*Page 2*

From the City's perspective, the declaration of surplus water needs to be completed in accordance with the provisions of the water supply contract. The process and calculation will determine the existence of surplus water. It is either there or it is not. Once surplus water is declared, it is the City's intent to use its proportionate share in combination with the City's ongoing conservation efforts to ensure that the City's long-term water sources are balanced and protected. It is also the view of the City that any deviation from the District's contractual responsibility to complete the water surplus calculation process would be a breach of the Water Supply Contract between the City and the District.

The Grover Beach City Council *strongly requests* that the Board ensure the declaration of surplus water be conducted per the provisions of the agreement.

Sincerely,

A handwritten signature in black ink, appearing to read 'DEB', followed by a large, stylized loop.

DEBBIE PETERSON

Mayor

c: Zone 3 Advisory Board  
Zone 3 Technical Advisory Committee



**From the Office of the Mayor**  
Shelly Higginbotham  
760 Mattie Road  
Pismo Beach, CA 93449  
(805) 235-6604  
[shigginbotham@pismo beach.org](mailto:shigginbotham@pismo beach.org)

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May 23, 2014

Bruce Gibson, Chair, and Supervisors  
San Luis Obispo County Board of Supervisors and  
Directors, San Luis Obispo County Flood Control and Water Conservation District  
Room D-430, County Government Center  
San Luis Obispo, CA 93408

**SUBJECT: COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT DECLARATION  
OF SURPLUS WATER**

Dear Chair Gibson, Supervisors, and Members of the Board:

I am writing on behalf of the Pismo Beach City Council to urge the District to undertake and complete the process of declaring surplus water availability at Lopez Lake in compliance with the provisions of the Water Supply Contract that exists between the District and the City of Pismo Beach.

The City receives its water supply from the State Water Project, Lopez Lake and the Santa Maria Ground Water Basin. Since its construction, the City has relied on Lopez Lake and its treatment facility to supply approximately 33% of the City's water needs through the regular allocation under the contract. In recent years, the City has also used the surplus water which first became available as the result of the heavy rain events beginning in 2010 to make the best use of our combined water sources.

It is our understanding that District staff will be seeking Board guidance in determining the existence of surplus water. According to Article 4. Distribution and Sale of Project Water subparagraphs (C) and (D) the amount of Surplus Water available annually is determined by a mathematical calculation performed by the District. This calculation is based on the amount of water that exists over and above the lake's safe yield following the close of a water year. The safe yield consists of up to 4,200 acre feet made available for downstream release and the total of 4,350 acre feet of project water that is to be distributed to the Zone 3 contract agencies, including Pismo Beach. The safe yield totals 8,750 acre feet of water. Any unused project water or water over and above the safe yield is then placed in a pool and made available to the contracting agencies on a proportionate share basis as surplus water. As noted in the agreement, the determination of the existence of surplus water is based on the completion of the process and is not discretionary.

Since 2011 Pismo Beach, along with the other member agencies, have been managing our Lopez water supply by utilizing the declared surplus first, before using our entitlements. We have each intentionally preserved an amount of entitlement water each year so that it can be carried over to be declared as surplus in the next year and then used as part of that year's supply. In light of the current drought conditions, the City may also use the surplus in the coming year to offset the demand on the ground water basin and limit the potential for salt water intrusion. Every acre-foot of surplus water delivered is water that the Zone 3 agencies will not be required to pump from the Santa Maria Ground Water Basin. Since the surplus water declaration has not been made Zone 3 agencies have increased ground water pumping and have seen the Santa Maria Ground Water Basin level drop 3.75 feet between April 15, 2014 and May 5, 2014. Further the level of the ground water basin is below the "deep well index", an elevation


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that was identified as a trigger for increased monitoring for salt water intrusion into the ground water basin.

From the City's perspective, the declaration of surplus water needs to be completed in accordance with the provisions of the water supply contract. The process and calculation will determine the existence of surplus water. It is either there or it is not. Once surplus water is declared, it is the City's intent to use its proportionate share in combination with the City's ongoing conservation efforts to ensure that the City's long-term water sources are balanced and protected. It is also the view of the City that any deviation from the District's contractual responsibility to complete the water surplus calculation process would be a breach of the Water Supply Contract between the City and the District. Further, on May 15, 2014, the Zone 3 Advisory Committee made the recommendation that the County Board of Supervisors declare surplus water in an amount not less than 2,327 AF.

The Pismo Beach City Council *strongly requests* that the Board ensure the declaration of surplus water be conducted per the provisions of the agreement.

Sincerely,



Shelly Higginbotham  
Mayor

CC: Paavo Ogren, County Director of Public Works  
Zone 3 Advisory Board

## OFFICE OF THE MAYOR



300 E. Branch Street  
Arroyo Grande, CA 93420  
Phone: (805) 473-5400  
FAX: (805) 473-0386  
tferrara@arroyogrande.org  
www.arroyogrande.org

May 28, 2014

Bruce Gibson, Chair, and Supervisors  
San Luis Obispo County Board of Supervisors and Directors, San Luis Obispo County  
Flood Control and Water Conservation District  
Room D-430, County Government Center  
San Luis Obispo, CA 93408

### SUBJECT: COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT - DECLARATION OF SURPLUS WATER

Dear Chair Gibson, Supervisors, and Members of the Board:

I am writing on behalf of the Arroyo Grande City Council to urge the District to undertake and complete the process of declaring surplus water availability at Lopez Lake in compliance with the provisions of the Water Supply Contract that exists between the District and the City of Arroyo Grande.

The City receives its water supply from Lopez Lake and the Santa Maria Ground Water Basin. Since its construction, the City has relied on Lopez Lake and its treatment facility to supply approximately 61% of the City's water needs through the regular allocation under the contract. In addition, the City has used Lopez Lake "surplus water" which is more appropriately defined as "carry-over entitlement and unused down-stream release" whenever it has been declared.

In recent years, the San Luis Obispo County Director of Public Works was given the authority to declare surplus water, as the provisions are precisely included in accordance with the contract. **According to Article 4. Distribution and Sale of Project Water subparagraphs (C) and (D)** the amount of surplus water available annually is determined by a mathematical calculation performed by the District. This calculation is based on the difference between the amount of entitlement water delivered to the agencies plus the amount released downstream and the safe yield of the reservoir. The safe yield consists of up to 4,200 acre feet made available for down-stream release and the total of 4,350 acre feet of project water that is to be distributed to the contract agencies, including Arroyo Grande. The safe yield totals 8,730 acre feet of water. Any unused project water within the safe yield is then placed in a pool and made available to the contracting agencies on a proportionate share basis as surplus water in the next water year. As noted in the contract, the determination of the existence of surplus water is based on the completion of the process and is not discretionary.

Since 2011, Arroyo Grande, along with the other member agencies, has been managing our Lopez water supply by utilizing the declared surplus before our entitlements. We have each intentionally preserved an amount of entitlement water every year so that it can be carried over to be declared as surplus in the next year and then used as part of that year's supply. In light of the current drought conditions, the City may also use the surplus in the coming year to offset the demand on the ground water basin and limit the potential for sea water intrusion.

While the Contract appears to provide some discretion to the County to reduce water entitlement amounts during certain drought conditions, there are no provisions in the Contract that allow the County to modify surplus water allocations. In addition, protocols are currently being developed by the Zone 3 Technical Advisory Committee (TAC) to clarify procedures when entitlements would be impacted. Therefore, staff also recommends that no decisions be made regarding entitlements until those protocols are established.

On May 15, 2014, the Zone 3 Advisory Committee recommended that surplus water be declared in the amount of not less than 2,327 AF based on a modified calculation. From the City's perspective, the declaration of surplus water needs to be completed in accordance with the provisions of the water supply contract as it has been historically calculated which would yield slightly less surplus supply. However, we would support the Zone 3 Advisory Committee's recommendation as well. Once surplus water is declared, it is the City's intent to use its proportionate share in combination with the City's ongoing conservation efforts to ensure that the City's long-term water sources are balanced and protected.

The Arroyo Grande City Council strongly requests that the Board ensure the declaration of surplus water be conducted per the provisions of the agreement or as recommended by the Zone 3 Advisory Committee.

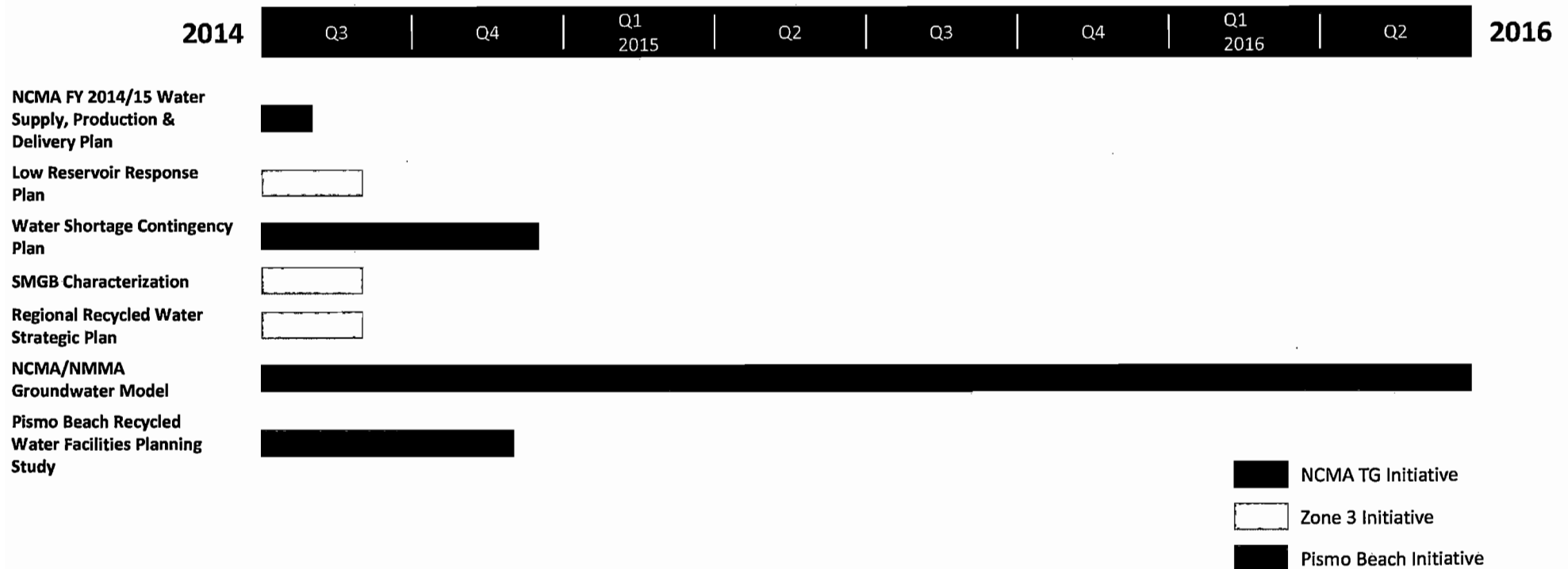
Sincerely,

A handwritten signature in black ink, appearing to read "Tony Ferrara", with a stylized flourish extending from the end.

Tony Ferrara  
Mayor

cc: Zone 3 Advisory Board

# NCMA TG/Zone 3 Strategic Initiative Timeline (Near-Term)





## **PISMO BEACH COUNCIL AGENDA REPORT**

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### **SUBJECT/TITLE:**

**NORTHERN CITIES MANAGEMENT AREA (NCMA) STRATEGIC PLAN AND WATER CONSERVATION DISCUSSION AND WATER DECLARATION**

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### **RECOMMENDATION:**

Adopt a **Resolution** authorizing the City Manager to enter into agreements with Water Systems Consulting, Inc. (WSC) on behalf of the NCMA for implementation of the NCMA Strategic Plan initiatives and transfer \$75,000 from the Wadsworth Waterline Project to the Water Enterprise Fund Professional Services Account to fund a portion of the NCMA Strategic Plan; And adopt a **Resolution** declaring a modified Severely Restricted Water Supply Condition, and to provide staff with direction on how to proceed with water conservation/rebate programs.

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### **BACKGROUND:**

At the April 15, 2014, Council meeting, Council received a detailed history of the Santa Maria Ground Water Basin and its litigation. The 2008 Judgment after trial established adjudicated rights to the Santa Maria Groundwater Basin (SMGB) and established three management areas: the NCMA, Nipomo Mesa Management Area (NMMA) and the Santa Maria Valley Management Area (SMVMA).

The NCMA is comprised of the Cities of Arroyo Grande, Grover Beach and Pismo Beach, and the Oceano Community Services District. Through the NCMA Technical Group (TG), comprised of representatives from each agency, the members of the NCMA work together to manage the SMGB and meet the annual reporting requirements of the Court Order. At the last Council meeting, staff presented the 2013 NCMA Annual Report.

California, and in particular the County of San Luis Obispo, is in the midst of the worst drought on record. This is evident by the lack of rain fall, 4.32 inches in 2013 and the following governmental actions:

- On January 17, 2014, Governor Gerry Brown issued a proclamation declaring a Drought State of Emergency for the State of California.
- On February 4, 2014, the Pismo Beach City Council declared a "Moderately Restricted Water Supply Condition."
- On March 4, 2014, the San Luis Obispo County Board of Supervisors declared a drought emergency.

### **NCMA Strategic Plan**

Though outside the scope of what the court ordered of the NCMA, in late 2013, the NCMA TG began the development of the NCMA TG Strategic Plan (Strategic Plan) for the purpose of providing a framework for communicating water resource goals and to establish a 10-year work plan for implementation of those efforts. Representatives from the member agencies along with our contracted administrative staff from Water

Systems Consulting, Inc. (WSC) saw the need to advance cooperative management of the region's water supplies, in particular the SMGB, to not only help the agencies through the drought, but to also ensure that the agencies were able to provide water to all of the citizens living in the NCMA area in case of an emergency.

Technical advisors from each agency met on November 18, 2013, and January 29, 2014, to put together the framework of the NCMA Strategic Plan.

In addition to identifying several key objectives including; water supply reliability, increased outreach, and basin management, the group penned the first ever NCMA Mission Statement to help guide ongoing initiatives. The mission statement is as follows:

Preserve and enhance the sustainability of water supplies for the Northern Cities Area by:

- Enhancing supply reliability
- Protecting water quality
- Maintaining cost-effective water supplies
- Advancing the legacy of cooperative water resources management

Through the strategic planning process, the NCMA TG also identified several key objectives to guide future efforts. These objectives include:

1. Enhance Water Supply Reliability
  - Prepare the Northern Cities for prolonged drought conditions
  - Develop coordinated response plan for salt water intrusion and other supply emergencies
  - Analyze impacts of pumping on the groundwater basin
  - Better protect against threats to groundwater sustainability
2. Improve Water Resource Management
  - Update the 2002 Settlement Agreement
  - Develop more formalized structure/governance for the NCMA TG
3. Increase Effective Outreach
  - Engage agriculture stakeholders
  - Improve coordination with SLOCFC&WCD and other regional efforts
  - Increase communication with City Council & Board of Directors

The NCMA TG utilized a screening and objective ranking process to develop prioritized strategies for improving the sustainability of water resources in the NCMA. Initially the TG developed a list of potential initiatives to consider during the screening process. Subsequently, the TG developed seven (7) criteria to rank the initiatives. Utilizing these criteria, each of the initiatives was ranked independently on a scale from one (low score) to three (high score). Upon completion of the independent scoring and prior to reviewing the results, weighting factors were applied to each of the evaluation criteria. The combination of the ranking for each criteria and the weighting factor for that criteria were then utilized to develop the scoring for each initiative. The Evaluation Criteria and



the Weighting Factors utilized for the strategic initiative screening are shown in the table below.

<b>Evaluation Criteria</b>	<b>Weight Factor</b>
Reliability Enhancement	3
Cost Effectiveness	2
Enhanced Management	3
Jurisdictional Alignment	1
Outside Stakeholder Interest	1
Feasibility	2
Sustainability	3

Key efforts include:

- Intertie Plan and Inter-agency Mutual Aid requirements – this effort includes developing an intertie model and evaluating upgrades to connect pipes and develop pipe capacity to deliver water between agencies as well as necessary mutual aid agreements in order to protect against vulnerabilities due to drought or loss of specific water supplies.
- Water Shortage Contingency Plan – this effort includes coordinating urban water management plans for the northern cities and developing a coordinated plan of action to respond to a severe shortage condition within the NCMA.
- Salt and Nutrient Management Plan – this study will shortly be required by the State and will provide data for the development of a groundwater model. The current grant study nearing completion (the Santa Maria Ground Water Basin Characterization) will inform this plan.
- Groundwater Model – this will allow simulation and prediction of aquifer condition and improve the understanding of the movement of groundwater within the basin. The model would also be necessary to determine the potential benefit of various water supply enhancement projects and management strategies. Ultimately, this is the pivotal tool to allow the agencies to identify the most effective strategy for enhancing the conjunctive use of the basin and improving the water supply reliability for the region.
- Recycled Water Supplemental Supply – this will allow the NCMA agencies to put their wastewater supplies to beneficial use. Through use of the groundwater model, alternative strategies for the implementation of recycled water (e.g. landscape irrigation, groundwater recharge, seawater intrusion barrier, and/or agricultural irrigation, etc.) can be analyzed to identify the most cost effective strategy for utilizing recycled water to develop a drought proof supplemental supply.

Each Council Member has been provided a copy of the Final Draft of the NCMA Strategic Plan. A copy for public use can be found in the City Clerk's office located at 760 Mattie Road, Pismo Beach, CA 93994 or can be downloaded by scanning the QR code to the right or by visiting:  
<http://ca-pismo-beach.civicplus.com/DocumentCenter/View/43833>



### **Water Conservation Programs**

As presented to the Council at the June 17<sup>th</sup> meeting, the SMGB Key Well Index Level is below the 7.5 foot trigger established by the NCMA TG as an alert for sea water intrusion. The City is currently in a Moderately Restricted Water Supply Condition, and at the June 17<sup>th</sup> meeting Council asked City Staff to bring forward a list of water conservation measures and initiatives that could be acted upon. The following is a list that Council can choose from. If Council wishes to enact any of the "rebate" programs, Staff will identify funding options and bring that to the next Council meeting. The list below identifies potential programs the City can initiate and ideas on cost per unit.

#### **Cash for Grass**

This program would reimburse residents for every square foot of lawn they removed and replaced with drought tolerant landscaping. New landscaping would have to have drip or micro spray irrigation and be on an automatic timer. Typical amounts are \$0.25 to \$0.50 per square foot with a minimum square footage (50 to 100 square feet) requirement and maximum rebate (\$1,000 to \$2,000). City Staff would perform inspections before and after the project to verify that the project satisfied all of the required criteria.

#### **Washing Machine Rebates**

This Program would reimburse residents for the purchase and installation of CCE (Consortium for Energy Efficiency) tier 2 or for tier 3 washing machines. Typical rebates are between \$50 to \$200, more for higher efficient units. The machine being replaced would have to be a non efficient model. City Staff would perform inspections before and after the purchase to verify both units before a rebate would be issued.

#### **Smart Irrigation Controller Program**

This program would pay for all or part of the cost of a new irrigation controller. The program would only cover specific brand and models of irrigation controllers that have features such as automatic irrigation adjustments for rain or wet weather. These controllers are approximately \$130 new.

#### **Irrigation Retrofit Program**

This program would provide a rebate for water customers who convert manually operated irrigation to automatic irrigation. The rebate would be based upon the number of valves that were converted and could range from \$20 to \$100.

### Plumbing Retrofit Rebate Program

This program would have several incentives including toilet replacement, installation of pressure regulators, replacement of shower heads and installation of indoor faucet aerators. Typical requirements are:

- Toilet replacement – existing toilet must be 2 gallons per flush (gpf) or greater and new toilet must be 1.28 gpf or less. Rebate could range from \$30 to \$250 and be based on a formula of water saved per flush.
- Pressure regulator – City staff would adjust for free existing pressure regulators to 75 pounds per square inch (psi) and/or the City will reimburse part or all of the cost of a pressure regulator. Typically pressure regulators cost \$130.
- Shower head replacement – City staff would replace for free a high flow shower head to one that is limited to 1.5 to 2.5 gallons per minute (gpm) or if residents don't like the shower heads provided by the program a rebate of half the cost of a shower head of their choice up to \$30 to \$50 could be provided.
- Indoor faucets – City staff would install at no charge aerators designed for 2.0 (gpm or less). Typical cost per faucet would be \$5 plus staff time.

### Rain Harvesting Rebate

This program would provide a rebate, typically \$0.50 to \$1 for every gallon of capacity of storage of a rain harvesting system. The system would be required to capture rainwater, store said rainwater and make it available for irrigation of houseplants or landscaping on the property. Gray water systems would not qualify. The total rebate would have a maximum amount possible.

- Rain Harvesting Rebate – \$0.50 to \$1 per gallon capacity of storage (maximum limit)

### Commercial Urinal Rebate Program

This program would provide up to \$250 for flushless urinals. The rebate could be based on gpf of existing urinal, or could be a flat amount.

### Mandatory Flushless Urinal Replacement Program

This program would require that any urinal installed within the City limits be a flushless urinal. This would include new installations as well as urinal replacements. This program could also require flushless be installed at all commercial remodels when the total valuation of the remodel exceeds a certain dollar amount (i.e. all remodels more than \$10,000 or those that are more than 30 times the cost of the urinal). This program may or may not provide a rebate.

### **Mandatory Water Use Restriction**

On February 4, 2014, the Pismo Beach City Council declared a “Moderately Restricted Water Supply Condition.” Section 13.24.020 of the City’s municipal code allows the City Council to declare one of four water supply conditions. They are:

- Normal water supply condition
- Moderately restricted supply condition
- Severely restricted supply condition
- Critical water supply condition

Each water supply condition has various water use restrictions associated with it. Staff is recommending that the City Council declare a Severely Restricted Water Supply Condition with slightly modified restrictions, this is the next step in mandatory water restrictions as allowed by the Municipal Code. Municipal code section 13.24.050 places the following restrictions on water use under a Severely Restricted Water Supply Condition:

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor water use – except irrigation.
  1. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such use except where necessary to protect the public health and safety;
  2. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- C. Outdoor Irrigation.
  1. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  2. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- D. Restaurants shall serve drinking water only in response to a specific request by a customer.
- E. Emptying and refilling swimming pools and commercial spas is prohibited except to prevent structural damage and/or to provide for the public health and safety.
- F. Use of potable water for compaction or dust control purposes in construction activities is prohibited. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.050)

Staff recommends modifying the restrictions as follows (changes shown in bold):

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. Outdoor water use – except irrigation.
  1. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such uses except **by the City contracted street sweeper, or** where necessary to protect the public health and safety;
  2. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.

C. Outdoor Irrigation.

1. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
2. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.

D. Restaurants shall serve drinking water only in response to a specific request by a customer.

E. Use of potable water for compaction or dust control purposes in construction activities is prohibited. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.050)

1. **Other potable water use during construction may be restricted at the discretion of the City Engineer. Such restrictions will be based upon the City's current water supply condition, availability of nonpotable water by the contractor and/or if in the opinion of the City Engineer the water use is considered wasteful.**

The next elevated water supply condition, Critical Water Supply is detailed in Municipal Code section 13.24.060 and reads as follows:

In addition to the conditions specified in Section 13.24.050, the City Council may impose any water rationing requirement as it deems appropriate to protect public health, safety, welfare, comfort and convenience. (Ord. 90-10 § 2 (part), 1990: prior code 13.06.060)

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**FISCAL IMPACT:**

The City's projected share of costs for studies proposed by the NCMA TG to better manage the area's water supply and develop a project and overall strategy to protect the City's groundwater supply from seawater intrusion are as follows:

	<u>NCMA Total</u>	<u>City Share (16%)</u>
<b>Groundwater Model</b>	<b>\$650,000</b>	<b>\$104,000</b>
Monitoring Well	\$15,000	\$2,400
<b>Salt and Nutrient Management Plan</b>	<b>\$250,000</b>	<b>\$40,000</b>
Groundwater Storage	\$250,000	\$40,000
Management Agreement	\$100,000	\$16,000
Intertie Plan	\$34,000	\$5,440
Inter-agency Mutual Aid	\$25,000	\$4,000
Supplemental Water Strategy	\$50,000	\$8,000
Outreach to Agricultural Community	\$8,000	\$1,280
Regional UWMP	\$170,000	\$27,200
<b>Water Shortage Contingency Plan</b>	<b>\$50,000</b>	<b>\$8,000</b>
Optimization of Surface Water Supply	\$100,000	\$16,000
<b>Total</b>	<b>\$1,702,000</b>	<b>\$272,320</b>

The majority of these studies would be completed within five years. The City's share of these costs is based on the City's groundwater allocation percentage. Staff proposes to

transfer \$75,000, from the Wadsworth Waterline Project to the Water Enterprise Fund Professional Services Account, which will allow for the projects in **bold** above to be started. Since the groundwater model is a multi-year project we do not need to provide full funding for that project at this time. Further it should be noted that if the City wishes to upgrade the Waste Water Treatment Plant to tertiary treatment, regulatory agencies require that a Salt and Nutrient Management Plan be in place. Completing this project in conjunction with the NCMA Strategic Plan will save the City \$210,000, through our NCMA cost share agreement.

There is currently \$521,467, for Shell Beach I Reservoir maintenance, \$480,000, for Pacific Estates Reservoir maintenance in FY 15, and \$500,000, for the Wadsworth Waterline Upgrade. After further inspection it was determined that the Shell Beach Reservoir I will need to be replaced at a cost of approximately \$1.2M and the Wadsworth waterline is being installed by a developer as a condition of approval for Tract 3050.

#### **Available Funds**

Shell Beach Reservoir I		\$521,467
Pacific Estates Reservoir		\$480,000
Wadsworth Water Line		\$500,000
Subtotal		1,501,467
Shell Beach Reservoir Replacement	\$1,200,000	
<b>Total Available Funds</b>		<b>\$301,467</b>

#### **Proposed Expenditures**

NCMA Strategic Plan	\$75,000	
<b>Budget Surplus</b>		<b>\$226,467</b>

Staff anticipated using the budget surplus for the Dell Court/Price Canyon Road/Tulare Street water line upgrade project, however if Council wishes to use this surplus for rebate programs staff can possibly identify other funds for the water line upgrade projects. Further, if Council wishes, General Fund Contingency could be identified to fund the rebate programs.

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#### **ALTERNATIVES:**

1. Authorize the City Manager to enter into an agreement with WSC on behalf of the NCMA, but transfer a different dollar amount than the \$75,000 recommended by Staff.
2. Do not authorize the City Manager to enter into an agreement with WSC on behalf of the NCMA and provide Staff with direction on how to proceed.
3. Do not declare a Severely Restricted Water Supply Condition with modified restrictions and provide Staff with direction on how to proceed.

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#### **ATTACHMENTS:**

1. Resolution – NCMA Strategic Plan
  2. Resolution – Water Supply Declaration
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**Prepared by:** Benjamin A. Fine, P.E., Director of Public Works/City Engineer

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**Meeting Date:** July 1, 2014

**City Manager Approval:**

A handwritten signature in black ink, appearing to read "Janet K. [unclear]", is written over a light gray rectangular background.

**RESOLUTION NO. R-2014-**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PISMO BEACH AUTHORIZING THE CITY MANAGER TO ENTER INTO AGREEMENTS WITH WATER SYSTEMS CONSULTING, INC. (WSC) ON BEHALF OF THE NCMA FOR IMPLEMENTATION OF THE NCMA STRATEGIC PLAN INITIATIVES AND TRANSFER \$75,000 FROM THE WADSWORTH WATERLINE PROJECT TO THE WATER ENTERPRISE FUND PROFESSIONAL SERVICES ACCOUNT TO FUND A PORTION OF THE NCMA STRATEGIC PLAN**

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**WHEREAS**, the NCMA TG began the development of the NCMA TG Strategic Plan (Strategic Plan) for the purpose of providing a framework for communicating water resource goals and to establish a 10-year work plan for implementation of those efforts; and

**WHEREAS**, representatives from the member agencies along with our contracted administrative staff saw the need to advance cooperative management of the region's water supplies, to not only help the agencies through the drought, but to also ensure that the agencies were able to provide water to all of the citizens living in the NCMA area in case of an emergency; and

**WHEREAS**, through the strategic planning process, the NCMA TG identified several key objectives to guide future efforts; and

**WHEREAS**, the City's share of the cost of these key objectives is based on the City's groundwater allocation percentage; and

**WHEREAS**, staff proposes to transfer \$75,000 from the Wadsworth Waterline Project to the Water Enterprise Fund Professional Services Account, which will allow for some the key objectives to be started.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Pismo Beach hereby authorizing the City Manager to enter into agreements with Water Systems Consulting, Inc. (WSC) on behalf of the NCMA for implementation of the NCMA Strategic Plan initiatives and transfer \$75,000 from the Wadsworth Waterline Project to the Water Enterprise Fund Professional Services Account to fund a portion of the NCMA Strategic Plan.

**UPON MOTION OF** Council Member \_\_\_\_\_ **seconded by** Council Member \_\_\_\_\_ **the foregoing resolution was adopted by the City Council of the City of Pismo Beach this 1<sup>st</sup> day of July 2014, by the following vote:**



<b>AYES:</b>	<b>Council Members:</b>
<b>NOES:</b>	<b>Council Members:</b>
<b>ABSENT:</b>	<b>Council Members:</b>
<b>ABSTAIN:</b>	<b>Council Members:</b>

**Approved:**

**Attest:**

---

**Shelly Higginbotham**  
**Mayor**

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**Elaina Cano, CMC**  
**City Clerk**

**RESOLUTION NO. R-2014-****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PISMO BEACH  
DECLARING "SEVERELY RESTRICTED WATER SUPPLY CONDITIONS" WITH  
MODIFIED RESTRICTIONS**

**WHEREAS**, California, and in particular the County of San Luis Obispo, is in the midst of the worst drought on record; and

**WHEREAS**, on January 17, 2014, Governor Gerry Brown issued a proclamation declaring a Drought State of Emergency for the State of California; and

**WHEREAS**, on February 4, 2014, the Pismo Beach City Council declared a "Moderately Restricted Water Supply Condition."; and

**WHEREAS**, on March 4, 2014 The San Luis Obispo County Board of Supervisors declared a drought emergency; and

**WHEREAS**, staff is recommending that the City Council declare a Severely Restricted Water Supply Condition with the following restrictions:

- A. Use of water which results in excessive gutter runoff is prohibited.
- B. No outdoor water use – except irrigation.
  - 1. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such uses except by the City contracted street sweeper, or where necessary to protect the public health and safety;
  - 2. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- C. Outdoor Irrigation.
  - 1. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.;
  - 2. Irrigation of private and public landscaping, turf areas and gardens is permitted at even-numbered addresses only on Mondays and Thursdays and at odd-numbered addresses only on Tuesdays and Fridays. All customers are directed to use no more water than necessary to maintain landscaping.
- D. Restaurants shall serve drinking water only in response to a specific request by a customer.
- E. Use of potable water for compaction or dust control purposes in construction activities is prohibited. (Ord. 90-10 § 2 (part), 1990: prior code § 13.06.050)
  - 1. Other potable water use during construction may restricted at the discretion of the City Engineer. Such restrictions will be based upon the City's current water supply condition, availability of nonpotable water by the contractor and/or if in the opinion of the City Engineer the water use is considered wasteful.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Pismo Beach hereby declare "Severely Restricted Water Supply Conditions" with modified restrictions.

**UPON MOTION OF** Council Member \_\_\_\_\_ seconded by Council Member \_\_\_\_\_ the foregoing resolution was adopted by the City Council of the City of Pismo Beach this 1<sup>st</sup> day of July 2014, by the following vote:

<b>AYES:</b>	<b>Council Members:</b>
<b>NOES:</b>	<b>Council Members:</b>
<b>ABSENT:</b>	<b>Council Members:</b>
<b>ABSTAIN:</b>	<b>Council Members:</b>

**Approved:**

**Attest:**

\_\_\_\_\_  
**Shelly Higginbotham**  
**Mayor**

\_\_\_\_\_  
**Elaina Cano, CMC**  
**City Clerk**

## STAFF REPORT

**TO: HONORABLE MAYOR AND CITY COUNCIL**

**FROM: GREG RAY, DIRECTOR OF PUBLIC WORKS/CITY ENGINEER**

**SUBJECT: DECLARATION OF WATER SHORTAGE STAGE 3**

### **BACKGROUND**

The City Council adopted the 2010 Urban Water Management Plan (UWMP) on June 20, 2011. The 2010 UWMP included an updated Water Shortage Contingency Plan (Contingency Plan). The Contingency Plan is used to define Water Shortage Conditions and appropriate actions relative to those conditions. The Contingency Plan defines a Water Shortage Condition in four (4) stages, beginning with a Minor Water Shortage as Stage 1, continuing through Stage 4 defined as a Critical Water Shortage Condition and then Stage 5, Termination of the Water Shortage Condition. Refer to Exhibit A of the Resolution for a copy of the Contingency Plan.

The City is experiencing the third year of a prolonged drought. Based on the methodology adopted in the Contingency Plan, staff is recommending that Council adopt a Stage 3 – Severe, Mandatory Water Shortage Condition.

### **DISCUSSION**

Rain gauge measurements between April of 2013 and March of 2014 recorded below average rainfall. The blended average rainfall amount was 33% of the Benchmark. Cumulative rainfall during the same period was measured at 8.9 inches at the Lopez gauge and 4.3 inches at the City Corporation Yard gauge. Storage behind the Lopez Dam is at 56% of capacity as of March 31<sup>st</sup>.

In accordance with the Contingency Plan, staff uses a running average annual rainfall beginning with the first year rainfall falls below 65% of the Benchmark rainfall to determine the appropriate stage of action. The Benchmark is 20 inches of annual rainfall which is the historical average rainfall measured at the Lopez Lake and City Corporation Yard rain gauges. For the last three years rainfall has fallen below the Benchmark. The three-year running average this year was calculated at 46% of the Benchmark.

Staff also considered other factors identified in the Contingency Plan including City well levels and indications of seawater intrusion. Well levels and the condition of the groundwater basin are discussed in the Northern Cities Management Area Annual Report. The Annual Report is a groundwater management report prepared by water engineering consultants for the Cities of Grover Beach, Arroyo Grande, Pismo Beach and the Oceano Community Services District. The report includes in-depth analysis of groundwater levels and water quality in wells located throughout the City's groundwater basin. The Northern Cities Management Area Annual Report

### **APPROVED FOR FORWARDING**

**ROBERT PERRAULT**  
**CITY MANAGER**

### **Please Review for the Possibility of a**

<input type="checkbox"/> None Identified by Staff	<input type="checkbox"/> Bright
<input type="checkbox"/> Peterson	<input type="checkbox"/> Marshall
<input type="checkbox"/> Lee	<input type="checkbox"/> Nicolls

**Meeting Date: June 16, 2014**

**Agenda Item No. \_\_\_\_\_**

for the water year ending in March of 2014 indicates well levels are approaching the levels experienced between 2007 and 2009. Evidence of seawater intrusion was found in near shore wells in 2009. This information supports staff's recommendation of a Stage 3 water shortage declaration.

A Stage 3 water shortage declaration will invoke certain **mandatory** water use **prohibitions**. These include:

- Use of potable water for street cleaning
- Unauthorized use of water from any fire hydrant
- Use of potable water to wash sidewalks or roadways where air-blowers or sweeping provides a reasonable alternative
- Use of potable water for construction purposes, such as consolidation of backfill unless no other source of water or method can be used
- Restaurant water service to patrons unless upon request
- Hydrant flushing except where required for public health and safety
- Refilling existing private pools except to maintain water levels
- Use of potable water for planting of turf and other new landscaping unless it consists of low water using, drought tolerant plants
- Use of water for washing cars, boats, sidewalks, driveways or other exterior surfaces without a quick-acting shut-off nozzle on the hose
- Operation of any ornamental fountain or car wash unless the water is re-circulated

Depending on the duration and severity of the water shortage, and at the discretion of the City Council, the above measures *could* include prohibiting water use for planting any new landscaping, limiting landscape watering to specific days of the week, and discontinuing operation of all fountains. In addition, the Contingency Plan indicates that the following measures and prohibitions become **mandatory** following a Stage 3 declaration:

- Notify all customers of the water shortage
- Mail information to all customers explaining the importance of water conservation
- Provide technical information to customers on means to promote water use efficiency
- Develop a media campaign to promote water conservation (incl. Channel 20)
- Develop or expand conservation programs such as low-flow toilet rebates
- Increase rates (requires City Council action and a proposition 218 hearing)
- Lower tiers (requires City Council action and a proposition 218 hearing)

Although the Contingency Plan indicates that increasing water rates and lowering water use tiers are mandatory measures, it is clear that to do either will require City Council action and would require a Proposition 218 rate hearing so Council discretion is implied. Staff is not recommending adjusting rates or tiers at this time.

According to the Contingency Plan violation of mandatory prohibitions will result in penalties. Furthermore, it states that a reduction in water use of 10% will be required during a Stage 3 water shortage. The Public Works Director is responsible for determining if individual accounts are meeting the required 10% water use reduction goal and to apply penalties for failure to comply with the prohibitions and reduction goals. Refer to the Water Shortage Contingency Plan for penalty amounts and steps for assessing penalties.

Staff is recommending the following additional steps to implement the declaration of a Stage 3 water shortage.

- Directly notify large water users of the pending reduction goals and penalties.
- Offer large water users direct assistance in complying with the mandatory prohibitions and water use reduction goal, including information on possible plumbing retrofits and other water saving measures.
- Measure water use reduction in comparison to water use during the same billing period of the previous year. For example, compare a customer's June 2014 water bill to their June 2013 water bill to calculate the consumption reduction.
- The City will be required to meet the same reduction goals by reducing water use in parks and other public facilities.
- Report to Council on the status of water use reduction and water supply conditions at regular intervals during the Stage 3 water shortage.
- Implement additional measures, including water rate or tier adjustments if other measures fail to meet the reduction goal.

In accordance with the Contingency Plan, a Public Hearing has been scheduled at which time consumers of the City's water supply shall have an opportunity to express their opinions regarding the declaration and to present their respective needs to the Council. It is the prerogative of the City Council to decide which Water Shortage Stage of Action to invoke for the current year.

Staff is working collaboratively with other agencies in the region to develop common actions in response to the drought. These actions include identifying common water use prohibitions, identifying ways to share water resources that might preserve the health of the groundwater basin and working together to identify emergency response plans should the drought continue. Staff is also working to identify an appropriate methodology for sharing costs relative to these efforts. Staff will provide an update to Council regarding these activities at a future date.

### **ALTERNATIVES**

The City Council has the following alternatives to consider:

1. The City Council could continue the Stage 2 Water Shortage (Moderate-Voluntary) and direct staff to continue those measures as noted in the Water Shortage Stages of Action and to continue Consumption Reduction Methods.
2. The City Council could declare a Stage 3 Water Shortage (Severe, Mandatory) and direct staff to implement the consumption reduction goals, mandatory prohibitions and penalties as identified in the report.
3. Provide further direction to staff.

### **RECOMMENDED ACTION**

It is recommended that the City Council conduct the Public Hearing, receive public testimony, and adopt the Resolution declaring a Stage 3 Water Shortage Condition.

### **FISCAL IMPACT**

A Stage 3 Water Shortage Declaration will require significant amounts of staff time to

implement. Staff is recommending hiring a temporary employee to administer the program during the Stage 3 Water Shortage. In addition, mailing notices to all water customers will cost approximately \$5,000. It is unlikely that penalties will offset the additional costs to implement the Stage 3 Water Shortage. Water revenues will also decrease in direct proportion to consumption reductions. It may become necessary to implement a rate adjustment at some future time in order to offset the deficit to the Water Enterprise Fund.

There will be costs associated with reducing the City's water consumption. Many of these costs can be paid using funds from the Water Conservation Fund. Estimated costs are in the range of \$5,000 to \$15,000 for irrigation system improvements, reduction of turf areas and fixture retrofits.

### **PUBLIC NOTIFICATION**

The agenda was posted in accordance with the Brown Act. A one-eighth page Public Hearing notice was published in *The Tribune* on Friday, June 6, 2014. Public Hearing notices were also posted at City Hall, the Post Office, and the City bulletin board at the Train Station.

### **ATTACHMENTS**

1. Resolution Adopting a Stage 3 Water Shortage Condition

**RESOLUTION NO. 14-****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GROVER BEACH,  
CALIFORNIA, DECLARING A STAGE 3 WATER SHORTAGE CONDITION IN  
ACCORDANCE WITH THE ADOPTED WATER SHORTAGE CONTINGENCY PLAN**

**WHEREAS**, Resolution No. 11-39 adopting a Water Shortage Contingency Plan was passed, approved and adopted at a regular meeting of the City Council of the City of Grover Beach on the 20<sup>th</sup> day of June, 2011; and

**WHEREAS**, said plan contains definitions of five stages of water shortage actions, including Consumption Reduction Methods, Goals, Prohibitions and Penalties required for each Stage of Action; and

**WHEREAS**, the criteria for adopting a Stage 3 Water Shortage Condition have occurred; and

**WHEREAS**, certain water uses identified in the Water Shortage Contingency Plan are *prohibited* during a Stage 3 Water Shortage; and

**WHEREAS**, the Council has determined to implement the following measures in accordance with the Water Shortage Contingency Plan (refer to Exhibit A):

- Notify all customers of the water shortage
- Mail information to all customers explaining the importance of water conservation
- Provide technical information to customers on means to promote water use efficiency
- Develop a media campaign to promote water conservation (incl. Channel 20)
- Develop or expand conservation programs such as low-flow toilet rebates
- Penalties for violation of mandatory prohibitions.
- Require a reduction in water use of 10% during a Stage 3 water shortage.

and **WHEREAS**, the Council has determined to implement the following additional measures as recommended by staff:

- Directly notify large water users of the pending reduction goals and penalties.
- Offer large water users direct assistance in meeting the goals including information on possible plumbing retrofits and other water saving measures.
- Measure water use reduction in comparison to water use during the same billing period of the previous year. For example, compare a customer's June 2014 water bill to their June 2013 water bill to calculate the consumption reduction.
- Require the City to meet the same reduction goals by reducing water use in parks and other public facilities.
- Report to Council on the status of water use reduction and water supply conditions at regular intervals during the Stage 3 water shortage.
- Implement additional measures, including water rate or tier adjustments, if other measures fail to meet the reduction goal.

and **WHEREAS**, the Council has determined to implement the penalties in amounts and manner described in the Water Shortage Contingency Plan.



Resolution No. 14-\_\_\_\_  
Page 2

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Grover Beach does hereby declare a Stage 3 Water Shortage Condition, which includes ***mandatory water consumption reduction methods, goals, prohibitions and penalties*** against certain water uses, all listed above and in accordance with the Water Shortage Contingency Plan.

On motion by Council Member \_\_\_\_\_, seconded by Council Member \_\_\_\_\_ and on the following roll-call vote, to wit:

AYES:	Council Members -
NOES:	Council Members -
ABSENT:	Council Members -
ABSTAIN:	Council Members -

the foregoing Resolution was **PASSED, APPROVED, and ADOPTED** at a regular meeting by the City Council of the City of Grover Beach, California this 16<sup>th</sup> day of June, 2014.

\_\_\_\_\_  
DEBBIE PETERSON, MAYOR

Attest:

\_\_\_\_\_  
DONNA L. McMAHON, CITY CLERK

**EXHIBIT A****WATER SHORTAGE CONTINGENCY PLAN 2010****WATER SHORTAGE CONTINGENCY PLAN ELEMENTS**

The City of Grover Beach shall implement an updated Water Shortage Contingency Plan for 2010 using the following as adapted from the seven steps recommended in the Urban Drought Guidebook 2008 Updated Edition:

- DEFINITION OF WATER SHORTAGE, STAGES OF ACTION
- PROVISION OF CONSUMPTION REDUCTION METHODS
- DEFINITION OF PROHIBITIONS AND PENALTIES
- METHODS FOR THE ANALYSIS OF IMPACT ON REVENUES AND EXPENDITURES AS WELL AS MEASURES TO OVERCOME THESE IMPACTS
- MECHANISMS TO DOCUMENT ACTUAL REDUCTIONS IN WATER USE RESULTING FROM IMPLEMENTATION OF THE WATER SHORTAGE CONTINGENCY PLAN

**DEFINITION OF WATER SHORTAGE**

The amount of rainfall in a given year or series of years is recommended as the basis for definition for stages of action. Rainfall, the ultimate source of recharge to the groundwater basin and surface water supplies, is readily monitored, and is recognized as the basis for defining drought. Rainfall is cumulated daily and summarized on an annual basis. City of Grover Beach rainfall averages approximately 16 inches per year. Rainfall at Lopez Recreation Area averages approximately 24 inches per year. A blended average of 20 inches of rainfall during a rainfall season (July 1 through June 30) will be the “**Benchmark**” amount used to determine what stage of action is necessary to be implemented.

San Luis Obispo County Division of Public Works maintains online rainfall sensors and Lopez Reservoir levels. Lopez Recreation Center (707) will be used in determining the annual rainfall amount in the Lopez Reservoir area. The City of Grover Beach Public Works Department maintains rainfall records from manual recordings taken daily at the City Yard. These recordings will be used in determining the annual rainfall amount in the City of Grover Beach.

Alternate (backup) sites Lopez Dam (737) and Oceano (795) located at 4<sup>th</sup> Street and Hwy 1 overcrossing will be used as a comparison to validate the rainfall amounts recorded at the official stations.

Ongoing groundwater monitoring of sentry wells along the coast in the Northern Cities Management Area is conducted on a quarterly basis. Any abnormal

quarterly “Monitoring Report” shall be considered in determining the Stage of Action of a Water Shortage Declaration.

Yearly “**Blended Average Rainfall Amount**” is the average of “yearly” measured rainfall at the two official locations.

When the measured yearly “**Blended Average Rainfall Amount**” falls substantially below “**Benchmark**” for a given time and in the amounts defined in the following “Water Shortage Stages of Action”, a water shortage occurs.

### **WATER SHORTAGE STAGES OF ACTION**

Water Shortage Stages of Action shall be directly related to the defined “Benchmark”.

#### **STAGE I - MINOR - VOLUNTARY**

Rainfall Condition is 65% of “Benchmark” rainfall or a quarterly “Monitoring Report” raises the concern of potential seawater intrusion.

#### **STAGE II - MODERATE - VOLUNTARY**

Rainfall Condition is an average of 65% of “Benchmark” rainfall for two years in a row. Average will be determined beginning at the first year rainfall was 65% of “Benchmark.” If a quarterly “Monitoring Report” raises the concern of potential seawater intrusion, this condition shall be considered in making a Stage II determination.

#### **STAGE III - SEVERE – MANDATORY\***

Rainfall Condition is an average of 65% of “Benchmark” rainfall for three years in a row. Average will be determined beginning at the first year rainfall was 65% of “Benchmark.” Other factors, including any report of seawater intrusion, will also be considered before making a Stage III determination.

#### **STAGE IV - CRITICAL – MANDATORY\***

Rainfall Condition is an average of 65% of “Benchmark” rainfall for four years in a row. Average will be determined beginning at the first year rainfall was 65% of “Benchmark.” Other factors, including any report of seawater intrusion, will also be considered before making a Stage IV determination.

#### **STAGE V – TERMINATES THE EMERGENCY RESPONSE**

Could be declared by the City Council when rainfall has returned to normal levels, Lopez Reservoir has returned to normal levels, monitoring reports are satisfactory and the City Council is convinced it is safe to do so. Remove all mandatory conservation measures.

\* Before declaring a Severe or Critical Water Shortage except in the case of a sudden or catastrophic event, a public hearing will be held at which consumers of

such water supply shall have an opportunity to be heard to protest against the declaration and to present their respective needs to said governing board.<sup>1</sup>

The City Engineer will monitor the actual "Blended Rainfall Amount" and all monitoring reports at least on a seasonal basis. If the seasonal analysis indicates the first stage of action criteria may have been met, the City Engineer will notify the City Council and recommend the Council declare a "Stage I" water shortage. If the City Council declares a "Stage I" water shortage, the Director of Public Works/City Engineer of the City of Grover Beach will implement "Consumption Reduction Methods" (see next section).

The same procedure for monitoring and City Council notification will be followed for Stages II, III, IV, and V.

During any water shortage "Stage of Action" declared by the City Council, City Staff will closely monitor water consumption and make recommendations as appropriate to the City Council. When a "Stage V" condition is declared by the City Council, staff will return to monitoring seasonal rainfall and monitoring reports on at least an annual basis.

### **CONSUMPTION REDUCTION METHODS**

Once the City Council has declared a water shortage stage, measures will be implemented to meet water conservation goals. This section describes consumption reduction methods that will be implemented by the Director of Public Works in response to City Council declared water shortage "Stages of Action". These measures range from public education to mandatory watering days.

The following measures and prohibitions shall be VOLUNTARY during a Stage I or Stage II water shortage and become MANDATORY during a Stage III or Stage IV water shortage.

- Notify all customers of the water shortage
- Mail information to all customers explaining the importance of water conservation
- Provide technical information to customers on means to promote water use efficiency
- Develop a media campaign to promote water conservation (incl. Channel 20)
- Develop or expand conservation programs such as low-flow toilet rebates
- Increase rates (Requires City Council action)
- Lower tiers (Requires City Council action)

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<sup>1</sup> Excerpt from Urban Drought Guidebook 2008 Updated Edition, Appendix A, Water Code Section 350-359

### **Prohibitions:**

The Urban Water Management Planning Act requires prohibitions against specific water use practices during water shortages. The prohibitions include:

- Use of potable water for street cleaning
- Unauthorized use of water from any fire hydrant
- Use of potable water to wash sidewalks or roadways where air-blowers or sweeping provides a reasonable alternative
- Use of potable water for construction purposes, such as consolidation of backfill unless no other source of water or method can be used
- Restaurant water service to patrons unless upon request
- Hydrant flushing except where required for public health and safety
- Refilling existing private pools except to maintain water levels
- Use of potable water for planting of turf and other new landscaping unless it consists of low water using, drought tolerant plants
- Use of water for washing cars, boats, sidewalks, driveways or other exterior surfaces without a quick-acting shut-off nozzle on the hose
- Operation of any ornamental fountain or car wash unless the water is re-circulated

Depending on the duration and severity of the water shortage and at the discretion of the City Council, the above measures can include prohibiting water use for planting any new landscaping, limiting landscape watering to specific days of the week, and discontinuing operation of all fountains.

### **PENALTIES**

The Water Shortage Contingency Plan imposes penalties at various shortage stages including house call warnings, double and triple water rates and disconnection. Any fines or penalties assessed under this Plan are subject to the provisions of Grover Beach Municipal Code.

When the City Council declares water shortage Stage III or IV, prohibitions become **MANDATORY**.

- Violation of mandatory prohibitions will result in penalties.
- A reduction in water use of 10% will be required during a Stage III water shortage.
- A reduction in water use of 25% will be required during a Stage IV water shortage.
- Customers will be responsible for achieving these goals.

During Stage III or IV Water Shortage Conditions, the Director of Public Works will be responsible for determining if any water account is in violation of the Consumption Reduction goal.

Any account found in violation of the Consumption Reduction goal will be monitored and managed on a monthly basis until the Consumption Reduction goal is achieved.

Step 1. The Director of Public Works will notify any account not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Penalties for non-compliance will also be described.

Step 2. The Director of Public Works will notify any account still not meeting the goal and make a house call to remind the account of the mandatory prohibitions and consumption reduction requirement. A written warning will be given that penalties for non-compliance will be exacted if compliance is not achieved within the next billing cycle after notice is given.

Step 3. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now invoked and consists of 100% increase of each tier of water rates for the billing cycle after this notice is given.

Step 4. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now increased and consists of 200% increase of each tier of water rates for the billing cycle after this notice is given.

Step 5. The Director of Public Works will notify any account still not meeting the goal and remind the account of the mandatory prohibitions and consumption reduction requirement. Step 3 penalty is now increased and consists of 300% increase of each tier of water rates for the billing cycle after this notice is given.

- Increased water rates will remain in effect until the first billing period after water use meets the consumption reduction goal set for the stage of water shortfall declared by the City Council.
- In the event an account becomes delinquent, standard non-payment and disconnection rules shall apply.
- Before a disconnected account may be reconnected, all outstanding billings and a standard reconnection fee shall be paid.

## **METHODS FOR THE ANALYSIS OF IMPACT ON REVENUES AND EXPENDITURES**

For the City of Grover Beach, effective implementation of the Water Shortage Contingency Plan would result in a decline in potable water sales.

Revenues derived from penalties for excessive water use or water wasting during the water shortage would not effectively offset lost revenues.

This penalty related revenue will be applied toward administration of the Water Shortage Contingency Plan. Declining water demands will be offset to a small degree by a decline in operating expenses related to the amount of water provided, such as pumping (energy) and water treatment costs.

During a Stage III or Stage IV Water Shortage, City Staff will analyze water production, consumption, and projected revenue compared to the normally expected revenue. Revenue shortfalls, if any, will be determined and any need for temporary water rate increases will be reported as appropriate to the City Council.

Any temporary water rate increases will apply to all water accounts and are **IN ADDITION** or cumulative to any water rate increases invoked under the **PENALTIES** section.

## **MECHANISMS TO DOCUMENT ACTUAL REDUCTIONS IN WATER CONSUMPTION**

During a Stage III or Stage IV Water Shortage, City Staff will analyze water production, consumption, and projected revenue compared to goals set by the City Council. Reports will be prepared as appropriate and will contain enough information to fully document decreased consumption in comparison to goals set based upon the Water Shortage Stage of Action declared by the City Council.



## MEMORANDUM

**TO: CITY COUNCIL**

**FROM: TERESA MCCLISH, COMMUNITY DEVELOPMENT DIRECTOR  
GEOFF ENGLISH, PUBLIC WORKS DIRECTOR**

**SUBJECT: CONSIDERATION OF WATER SUPPLY STRATEGIES AND  
AMENDMENTS TO CONSULTANT SERVICES AGREEMENTS FOR  
TECHNICAL SUPPORT SERVICES FOR THE NORTHERN CITIES  
MANAGEMENT AREA WORK PROGRAM**

**DATE: JUNE 10, 2014**

**RECOMMENDATION:**

It is recommended that the City Council:

1. approve staff's recommended water conservation strategies; and
  - a. increase of the turf removal incentive from 50 cents to \$1.00 per square foot; and
  - b. approve the increase for the water efficient washing machine incentive from \$150 to \$200;
2. approve the Northern Cities Management Area Technical Group (NCMA TG) Annual Report Work Plan and Strategic Plan; and
  - c. authorize the Mayor to execute an Amendment No. 1 to the Agreement for Consultant Services with Fugro Consulting Inc. ("Fugro") in the amount of \$43,400 for the NCMA 2014 Annual Report, and
  - d. approve and authorize the Mayor to execute Amendment No. 6 to the Agreement for Consultant Services with Water Systems Consulting, Inc. ("WSC") in the amount of \$29,760 for staff extension services for FY 2014-2015;
3. direct staff to establish a Water Shortage Emergency Plan;
4. direct staff to establish an in-house Water Shortage Emergency Response Team; and
5. pursue scheduling a joint water workshop with the legislative bodies of Grover Beach, Pismo Beach and OCSD.



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**IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:**

Staff's recommendations are designed to achieve the City's water conservation goals by 2020, which provides an implementation period of 5.5 years. Total expenditures projected for this period are as follows:

<u>Program</u>	<u>FY 2014-15</u>	<u>Total</u>
Turf Removal Program	\$60,000	\$330,000
Washing Machine Rebates	\$8,000	\$44,000
Smart Irrigation Controller Program	\$8,000	\$44,000
Landscape Irrigation Retrofit	\$6,000	\$33,000
Plumbing Retrofit Program	\$52,050	\$286,275
System Water Loss Mitigation	\$25,000	\$100,000
City Landscape Irrigation	\$40,000	\$200,000
Water Survey Program	\$20,000	\$110,000
Public Education Campaign	\$100,000	\$410,000
<b>Total</b>	<b>\$319,050</b>	<b>\$1,557,275</b>

It is proposed to budget \$100,000 annually the first two years for public education and then decrease it to \$60,000 annually. System water loss mitigation is proposed to be funded over a four-year period and the City drought tolerant landscape improvements over a 5-year period. Therefore, total expenditures proposed for FY 2014-15 are projected to be \$319,050. It is proposed to fund the program from the following projected revenues:

Existing Water Mitigation Fee Funds	\$190,000
Future Projected Water Mitigation Fee Revenue	\$275,000
Annual Funds Programmed in Water Fund for Conservation	\$275,000
<u>Funding Available from Expiration of OCSD Water Purchase Agreement</u>	<u>\$825,000</u>
<b>Total</b>	<b>\$1,565,000</b>

The City's projected share of costs for studies proposed by the NCMA TG to better manage the area's water supply and develop a project and overall strategy to protect the City's groundwater supply from seawater intrusion are as follows:

	<u>NCMA Total</u>	<u>City Share (31.92%)</u>
Groundwater Model	\$750,000	\$239,400
Monitoring Well	\$15,000	\$4,788
Salt and Nutrient Management Plan	\$250,000	\$79,800
Groundwater Storage	\$250,000	\$79,800
Management Agreement	\$100,000	\$31,920
Inter-agency Mutual Aid	\$25,000	\$7,980
Supplemental Water Strategy	\$150,000	\$47,880

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Outreach to Agricultural Community	\$6,000	\$1,915
Regional UWMP	\$170,000	\$54,264
Water Shortage Contingency Plan	\$50,000	\$15,960
Optimization of Surface Water Supply	\$100,000	\$31,920
<b>Total</b>	<b>\$1,866,000</b>	<b>\$595,627</b>

The bulk of the studies are projected to be completed over a similar 5-year period. The cost sharing methodology was based on the percentage of groundwater allocated through the settlement agreement. It is proposed to fund these costs from the Water Availability Fund, which are revenues designed to ensure the continued reliability of the City's water supply. There is currently a balance of \$1.6 million in this fund.

Therefore, the total appropriation recommended for FY 2014-15 is \$914,677. FY 2014-15 expenditures are proposed to be funded from the following sources:

Existing Water Mitigation Fee Funds	\$119,050
Annual Funds Programmed in Water Fund for Conservation	\$50,000
Funding Available from Expiration of OCSD Water Purchase Agreement	\$150,000
<b>Water Availability Fund</b>	<b>\$595,627</b>
<b>Total</b>	<b>\$914,677</b>

All expenditure recommendations have been included in the year-end budget for Council approval of the appropriations. These proposed expenses may however be distributed over multiple fiscal years and some of the above requested funds may be rolled over into future budget years. The recommendations will result in a substantial commitment of staff resources. However, addressing water supply is one of the City's priorities identified in the Critical Needs Action Plan. It is also important to note that the other participating NCMA agencies, City of Grover Beach, City of Pismo Beach and the Oceano Community Services District, will be requested to participate in the financing of the NCMA management projects.

**BACKGROUND:**

The City's long-term water supply was identified as a significant issue during development of the City's 2001 General Plan Update. At the August 24, 2004 meeting, the City Council reviewed a Water Alternatives Study identifying 17 alternatives for Council consideration. Since that time, a number of studies have been completed on the following alternatives:

- Nacimiento Water project
- Price Canyon oil field recycled water
- Desalination
- Recycled water

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- Raising of the spillway at the Lopez Lake dam
- Acquisition of State water
- Lopez Spillway Raise study

The South San Luis Obispo County Sanitation District contracted with the Wallace Group in 2009 for a comprehensive Water Recycling Study, which was an update to an original study prepared in 2001. Additional studies were prepared in 2010 to assess the potential for a distribution system from either the South County Sanitation District or Pismo Beach wastewater treatment plants to potential users.

The limited number of user sites has been a barrier to making installation of a distribution system for turf irrigation cost effective and worthwhile. As a result, recent focus has been on determining the feasibility of using recycled water for groundwater recharge through crop irrigation, stream augmentation, or recharge by injection or surface spreading.

Among other recommendations, the report proposed to:

*Conduct additional feasibility studies to address hydrogeologic issues relative to aquifer recharge. This study is needed to define the locations suitable for injection or spreading basins, and to consider well locations for possible seawater barrier protection.*

The original strategy was to pursue grant funds for these efforts, which has been unsuccessful. In order to make progress on this effort, it is now currently proposed to locally fund necessary feasibility studies and pursue grants for construction of any recommended project deemed feasible.

In 2008, it was determined the City had utilized 99% of its water entitlements. At the August 12, 2008 meeting, the City Council approved a Resolution declaring a "severely restricted water supply condition." Mandatory conservation measures were enacted. These measures were later made permanent in 2010. Meanwhile, the City's water conservation program and tiered rate structure were expanded. In January 2009, the City entered into a 5-year temporary water purchase agreement with the Oceano Community Service District (OCSO), which expired in March of 2014. Well #10 was completed in 2011 and Well #11 is currently in design and scheduled for completion by the end of 2014.

In 2009, low groundwater levels and high chloride concentrations from water quality tests of one of the sentry wells located along the coast gave indications of incipient seawater intrusion. At the November 10, 2009 meeting, the City Council adopted an Interim Urgency Ordinance establishing a development moratorium. The moratorium was extended at the December 8, 2009 and April 13, 2010 meetings. The moratorium

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later expired in 2010. The State of California also enacted the Water Conservation Act 2009, which required a reduction of 20% in per capita water use by the year 2020.

In June 2010, staff presented a water analysis and strategies to the City Council, which identified a projected need of approximately 400 additional acre feet of water to meet the community's needs when it reaches its buildout population under the current General Plan. It was agreed to address these needs by expanding water conservation efforts, seeking purchase of State water, and to continue working on the potential for a water recycling project in the future. The City Council directed staff to prepare a ballot measure for the June 2012 election to enable purchase of State water. However, due to a number of concerns, this was later delayed to obtain additional data and further study of other alternatives.

In 2009, a technical group of the NCMA jurisdictions was formed to meet on a monthly basis to coordinate water sampling and preparation of an annual report required by the Court's decision in the Santa Maria Groundwater Basin Adjudication. Additionally, the group assumes the technical work in planning for the groundwater sub-basin and overall area water supply. The Technical Group includes representatives from Arroyo Grande, Grover Beach, Pismo Beach and OCSD. A consultant has also been jointly contracted by the agencies to help coordinate these efforts.

On January 17, 2014, Governor Brown issued a proclamation declaring a Drought State of Emergency for the State of California. Local urban water suppliers and municipalities are called upon to implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season. The City implemented its contingency plan and permanent mandatory conservation measures in 2010. Additionally, a statewide water conservation campaign calls on Californians to reduce their water usage by 20 percent. Local water agencies are also required to update their legally required urban and agricultural water management plans to help plan for extended drought conditions. The City's plan is up to date and is required to be updated again in 2015.

Staff has drawn two conclusions from the severity of the current drought. First, the likelihood of identifying agencies interested in selling permanent water supply to the City is increasingly improbable. Second, protecting and securing the City's existing water supply should be the highest priority since having dependable water sources is more valuable than a larger water supply that is unreliable when most needed. As a result, staff's recommendations are designed to accomplish the following goals:

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- Meet the City's future projected water demand of its buildout population by;
  - Meeting the reduction in per capita use as prescribed in the Water Conservation Act of 2009;
  - Proceeding with work necessary to develop a recycled water project that can be used to prevent seawater intrusion in order to provide long-range protection of the City's groundwater supply; and
- Ensure water use efficiency and drought protection through regional conjunctive use, storage and management of surface and groundwater supplies.

**ANALYSIS OF ISSUES:**

Water Supply and Demand

Table 1 below shows the current and projected water supply through 2030.

<b>Table - 1. Current and Projected Water Supply – AFY</b>					
<b>Water Supply Sources</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Groundwater – Santa Maria Groundwater Basin	1,323	1,323	1,323	1,323	1,323
Groundwater – Pismo Formation <sup>1</sup>	80	200	200	200	200
County of San Luis Obispo Lopez Reservoir Project	2,290	2,290	2,290	2,290	2,290
Oceano Community Services District <sup>2</sup>	100				
<b>TOTAL</b>	<b>3,793</b>	<b>3,813</b>	<b>3,813</b>	<b>3,813</b>	<b>3,813</b>

<sup>1</sup> Assumes 80 AFY of groundwater from Well No. 9, 80 AFY from Well No. 10, and 40 AFY from Well No. 11 will be available as a reliable source of supply from 2015 through 2030.

<sup>2</sup> Assumes that the remaining three years of the five year contract of 100 AFY with OCSD will be utilized in 2012, 2013 and 2014.

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Summary of Water Reduction Requirements for State Senate Bill X7-7:  
Table 2 below shows the projected water use by customer classification by 2015.

<b>Table 2. Projected Water Use by Category 2015 (AFY)</b>					
	2015				
	Metered		Not Metered		Total
Water use sectors	# of Connections	Volume	# of Connections	Volume	Volume
Single family	6,025	2,280	0	0	2,280
Multi-family	111	312	0	0	312
Commercial	413	312	0	0	312
Industrial	0	0	0	0	0
Institutional/ governmental	51	94	0	0	94
Landscape	123	125	0	0	125
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
<b>Total</b>	<b>6,723</b>	<b>3,123</b>	<b>0</b>	<b>0</b>	<b>3,123</b>

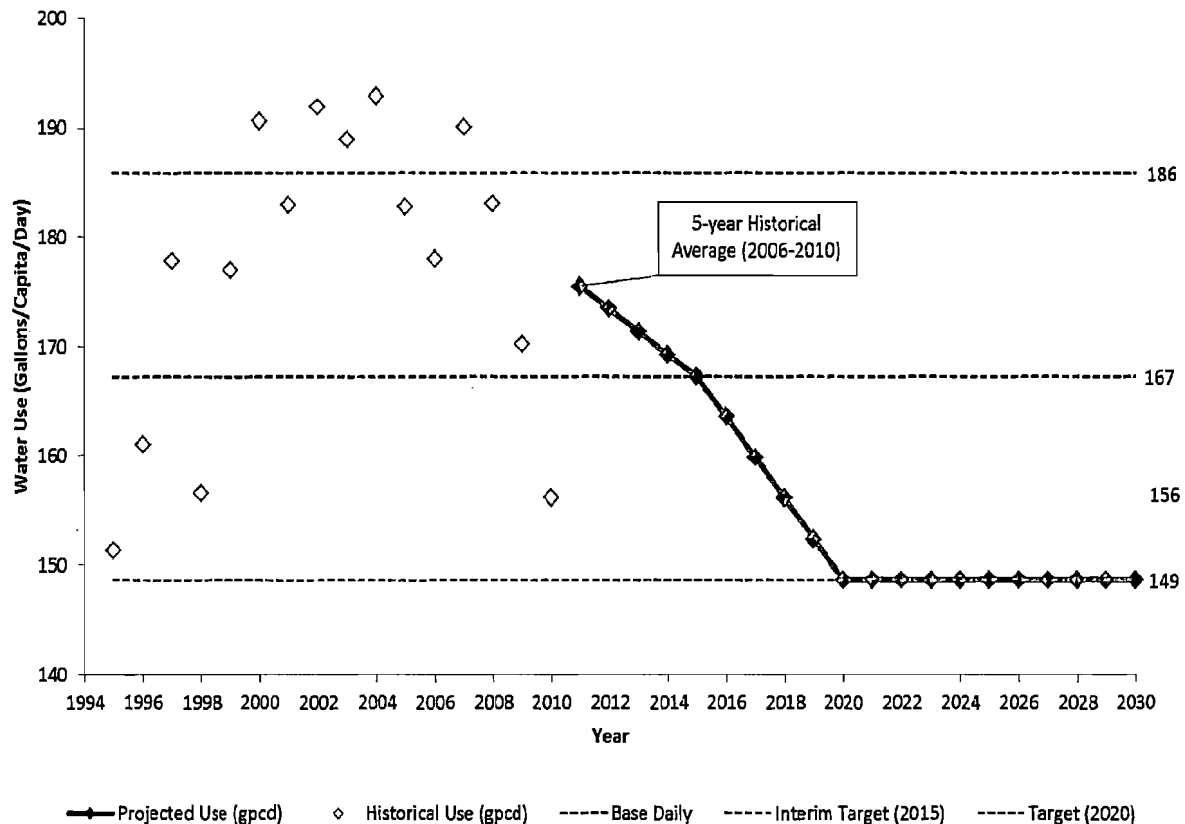
Overview of Growth Projections

According to the Census, Arroyo Grande grew 10.2 percent between 1990 and 2000 and 8.8 percent between 2000 (15,851) and 2010 (17,252). The California Department of Finance provides more updated population data and shows that the City decreased its population by 0.5% between 2013 and 2014 (17,415 to 17,334). Current estimates by the San Luis Obispo Council of Governments (SLOCOG) in their 2040 Regional Growth Forecast (August 2011) project the City's population to be approximately 18,407 residents by 2020, based upon an annual growth rate of 0.72%. The City's 2001 General Plan estimates that a buildout population of 20,000 will be reached by 2023. Given that the City has not experienced a continuous 1% growth rate as estimated in the General Plan, buildout will likely be later than 2023.

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Overview of City's Annual Water Reduction Goals

Figure 1 shows the projected per capita use production to meet the State water conservation reduction goal:

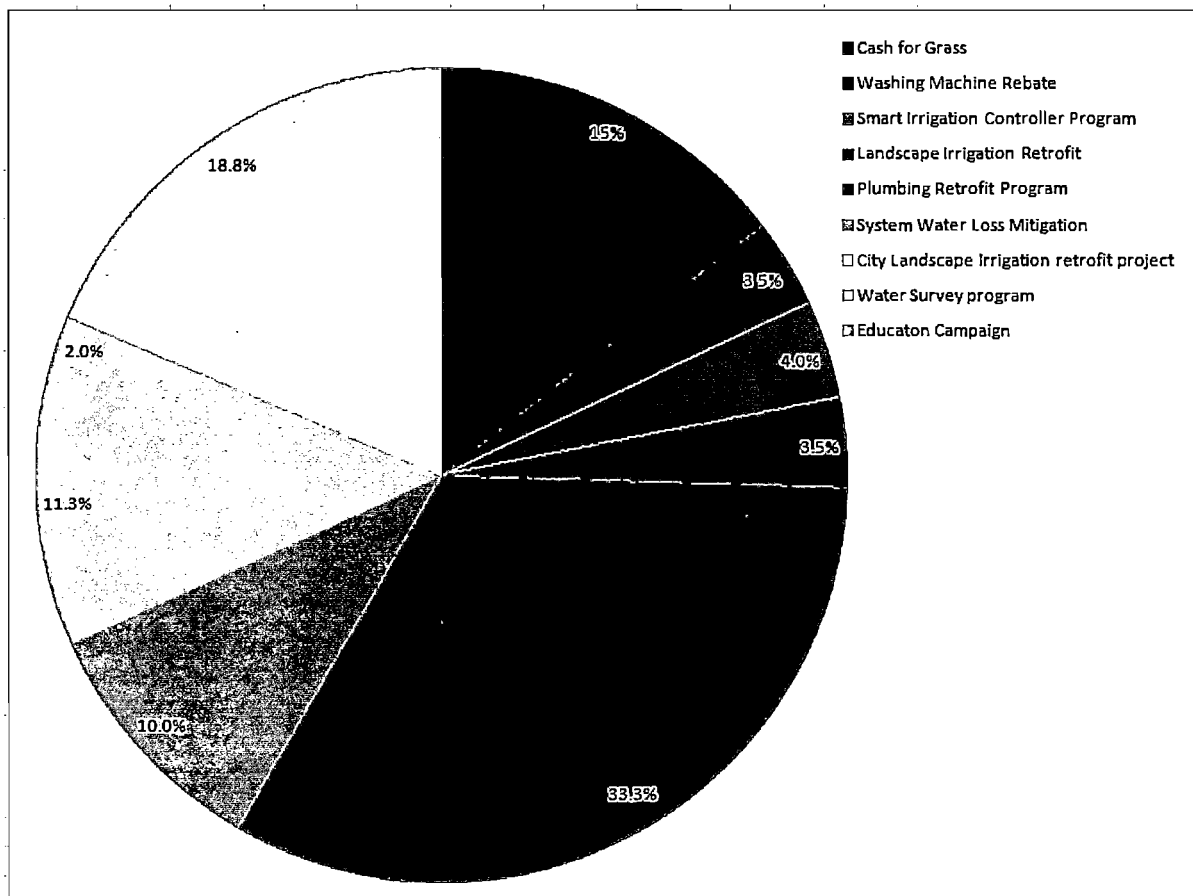


The City Council adopted a Water Conservation Program in May of 2003. Phase I of the program began in April of 2004, which focused on retrofitting existing residential plumbing with low flow fixtures. In 2008, the City Council appropriated \$50,000 from the Water Neutralization Fund to initiate water conservation rebate programs for turf removal, high efficiency washing machines and smart irrigation controllers. Staff recommends that a landscape irrigation retrofit program, system water loss mitigation project, City landscape irrigation retrofit program, and a water use survey program be added to the water conservation strategy. An overview of these programs is discussed below.

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Water Conservation Recommendations

Below is a pie chart outlining the proposed Water Conservation Strategy to meet the target of 149 gallons per resident per day by 2020.



Summary of Water Conservation Programs

- Plumbing Retrofit Program (existing)
- Cash for Grass Rebate Program (existing)
- Water Efficient Washing Machine Rebate Program (existing)
- Smart Irrigation Controller and Sensor Program (existing)
- Large Area Irrigation Retrofits (existing)
- Landscape irrigation retrofit program (proposed)
- Public Education Program (proposed)
- System Water Loss Mitigation Project (proposed)
- City Landscape Irrigation Retrofit Program (proposed)
- Water Use Survey Program (proposed)



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The Plumbing Retrofit Program replaces old, high water-use fixtures for residential units built prior to 1992. All parts and labor required for the retrofit are provided free of charge. The retrofit includes replacing the following fixtures:

- Toilets – replace with ultra low-flow 1.6 gallons per flush (as of January 1, 2014 the requirement is 1.28 gallons per flush). Cost is \$235 - \$290 per toilet.
- Indoor Faucets – install aerators designed for 2.0 gallons per minute. Cost is \$5 per faucet.
- Showerheads – replace with 2.5 gallons per minute. Cost is \$13 per showerhead.
- Pressure Regulator – inspect and adjust or install new regulator not to exceed 80 pounds per inch (pi). Cost is \$135 for new pressure regulator.

This program is voluntary; however, in February 2005 the City Council adopted an ordinance implementing a mandatory plumbing retrofit program upon the change of ownership of any real property. The seller must retrofit the property's plumbing fixtures to meet the criteria of low-water use. Staff estimates that his program saves 7.5 AFY of water. The goal is to retrofit 150 homes per year. Staff recommends that this program continue with no changes.

The Cash for Grass Rebate Program provides a financial incentive for homeowners and businesses to remove existing turf and replace it with a less water-intensive landscape. The goal of the program is to encourage a permanent reduction in the amount of water used for landscaping. The City currently pays \$0.50 per square foot of turf removed. The minimum amount of turf to be removed must be 250 square feet (\$125) and the maximum amount of turf to be reimbursed is 5,000 square feet (\$2,500). To date, 121 turf removal projects have been completed removing 14,716 square feet (3.23 acres) of grass. Staff estimates that this program saves 3.3 acre feet per year (AFY) of water.

In an effort to increase participation, staff recommends increasing the rebate from \$0.50 a square foot to \$1.00. The goal is to achieve 50 turf replacement projects per year. Staff also recommends increasing the minimum amount of turf removed from 250 to 500 square feet as there has been limited water savings with the smaller turf removal projects.

The Water Efficient Washing Machine Rebate Program provides a rebate of \$100 for Consortium for Energy Efficiency (CEE) Tier 2 washers and \$150 for CEE Tier 3 washers. On average, a high high-efficiency washer uses 20% less energy and 35% less water than regular washers, which can save up to 5,250 gallons per year per household. To date, 102 rebates have been issued. Staff estimates that 0.8 AFY of water is saved with this program. The goal is to replace 40 washers per year.

Staff recommends that only CEE Tier 3 washers be rebated since they save the most water, and the rebate amount be increased from \$150 to \$200 as an added incentive.

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The Smart Irrigation Controller and Sensor Program provides an irrigation audit with recommendations for system improvements and a smart controller with weather-based sensor technology to replace older controllers for residential properties. The City pays up to \$300 for a new controller per residence. The City contracts with Sprinkler King, Inc. to conduct the water audits and provide the controllers to qualifying participants. To date, 65 water audits have been performed with new controllers installed. The estimated water savings is 0.9 AFY with this program. The goal is to achieve 20 installations per year. Staff recommends that this program continue with no changes.

Since 2009, the City has contributed to Large Area Irrigation Retrofits for commercial, institutional and homeowner association (HOA) water users. To date, the City, with the assistance of Sprinkler King, Inc., have retrofitted the following properties:

- Strother Park
- St. Patrick's School
- Sunrise Terrace Mobil Home Park
- Paulding School
- Ocean View School
- Vista Del Mar HOA
- Wildwood Ranch HOA
- Five Cities Center
- Kmart Center
- Cemetery District
- Rancho Grande Park

It is estimated that 17.39 AFY is saved from the Strother Park, Paulding School, Ocean View School, Cemetery District and Rancho Grande Park retrofits (audits have not been completed for the other properties). Staff recommends that this program continue with no changes. The goal is to contact other large commercial, institutional and HOA water users to encourage participation in the program.

The proposed Landscape Irrigation Retrofit Program includes retrofitting outdated spray heads and drip emitters for existing residences. Sprinkler King, Inc. has conducted 60 residential irrigation audits for the City and provided information on the average sized landscape retrofit. This includes replacing 25 sprinkler heads with MP rotators and/or drip irrigation emitters. The estimated water savings is 30% per retrofit. The cost for an average residential irrigation retrofit using MP rotators and emitters, less labor and tax costs, is \$200. The estimated water savings is 0.8 AFY. The goal is to achieve 20 installations per year. Staff recommends this program be added as a new water conservation rebate program.

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The proposed Public Education Program would involve hiring a consultant to design an extensive public education marketing campaign to encourage water conservation citywide. The marketing campaign is proposed to include, but not be limited to, development of press releases, advertisements, brochures, posters, billboards and video segments for the government access channel. The estimated total water savings is approximately 23 AFY.

The proposed System Water Loss Mitigation Project will provide funding for a leak detection survey of the City's water distribution system. Approximately seven percent (7%) of the water produced or delivered to the City is lost through leaks, inaccurate water meters or other unaccounted for water loss. Most water distribution systems have typical water losses of between 5% and 10%. Staff believes that through a comprehensive leak detection survey and repair of identified water loss locations, a 2% reduction to the City's water system loss is attainable. A 2% reduction in water loss will generate a water savings of approximately 12.4 acre-feet.

The proposed City-owned Property Landscape Irrigation Retrofit Program will provide funding for a comprehensive effort to reduce water use at City parks and landscape areas. This program will involve turf removal and irrigation retrofit projects. Turf removal areas will be re-landscaped with drought tolerant landscaping. Arroyo Grande in Bloom will be consulted on the re-landscaping designs and final design plans are proposed to be reviewed by the Arroyo Grande Parks and Recreation Commission. This proposed program is also important because beginning in FY 2014-15, water costs for City parks and landscape areas will be charged to the General Fund. Previously water costs were borne by the Water Fund. It is estimated that this program will generate a water savings of approximately 14 acre-feet.

The proposed Water Use Survey Program is proposed to involve the use of existing Public Works Utilities Division staff to conduct water use surveys at targeted residential and commercial properties. If approved, funding for this program will be utilized to hire a temporary employee to back-fill the duties of one current Utilities Division employee. During the five and one-half year program, staff's goal will be to contact all of our water system customers to arrange for a Water Use Survey. However, the high use customers will be targeted first. Following the Water Use Survey, customers will be referred to existing water conservation programs and other necessary corrections that will help the customer reduce water use. It is estimated that this program will generate a annual water savings of approximately 2.5 acre-feet in addition to increasing participation in other incentive programs.

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Projected Water Savings:

Table 3 depicts the projected savings and costs for the various water conservation programs and efforts stated above based upon targets established for each proposed measure. The overall recommendations are designed to demonstrate how the City can accomplish and fund the efforts necessary to reach the total water use savings target.

<b>Table 3. Program Water Savings and Costs</b>							
<b>Program</b>	<b>Description</b>	<b>Quantity Per Year or %</b>	<b>Annual Savings (AFY)</b>	<b>Cumulative Savings (AFY)</b>	<b>Total %</b>	<b>Anticipated Cost</b>	<b>Cost Per AF</b>
Cash for Grass	Based on 50 individual turf replacement projects per year.	50	3.3	18.2	15%	\$330,000	\$18,182
Washing Machine Rebate	Based on 40 rebates per year.	40	0.8	4.4	4%	\$44,000	\$10,000
Smart Irrigation Controller	Based on 20 installations per year.	20	0.9	5.0	4%	\$33,000	46,667
Landscape Irrigation Retrofit	Based on 20 installations per year.	20	0.8	4.4	4%	\$55,000	\$12,500
Plumbing Retrofit	Based on 150 homes per year.	150	7.5	41.3	33%	\$286,275	\$6,940
System Water Loss Mitigation	Based on converting loss from 7% to 5% resulting from a leak detection audit.	2%	12.4	12.4	10%	\$100,000	\$8,065
City Landscape Irrigation Retrofit	25% reduction from current total use (current annual is 56AF).	25%	14	14.0	11%	\$200,000	\$14,286
Water Survey	SFR and MFR water audit program. Hire employee to conduct audits.	1%	205	2.5	2%	\$110,000	\$44,000
Education Campaign	7.5% overall savings based on Federal survey results.	7.50%	23.25	23.3	19%	\$410,000	\$17,634
<b>TOTAL:</b>					<b>101%</b>	<b>\$1,568,275</b>	<b>\$12,516</b>
<b>TOTAL WATER SAVINGS TARGET – 2020:</b>			<b>124</b>				

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For comparison purposes, the cost of increasing supply through acquisition of State water proposed in 2012 was estimated to be a one-time charge of \$25,000 to \$30,000 per acre foot and an ongoing cost of \$1,250 to \$1,350 per acre foot. Therefore, in addition to other practical issues, water conservation measures clearly provide the most cost efficient approach to addressing water needs.

Implementation Strategies

The City's Water Conservation Team staff meets regularly to implement the work program. Existing programs will be augmented to integrate new goals, including issuing Request for Proposals for the education program and system water loss efforts. Staff will monitor the program and provide updates to the City Manager.

NCMA Efforts

Annual Reports for the NCMA are prepared pursuant to the requirements of the Stipulation and 2008 Judgment for the Santa Maria Groundwater Basin Adjudication. The Annual Report provides an assessment of hydrologic conditions for the NCMA based on data collected during the calendar year of record. As specified in the Judgment, the NCMA agencies are to conduct groundwater monitoring in the NCMA, and collect and analyze data pertinent to water supply and demand, including:

- Land and water uses in the basin;
- Sources of supply to meet those uses;
- Groundwater conditions (including water levels and water quality);
- Amount and disposition of developed water supplies; and
- Amount and disposition of other sources of water supply in the NCMA.

Since April 2009, the NCMA TG has coordinated the data compilation and analysis required in the annual report for court submittal. The most recent report was submitted in April, 2014 (Attachment 1). Findings from the report include:

- Substantial lower than average rainfall;
- A significant drop in water levels from 2012;
- Data indicating that water levels are sensitive to municipal pumping irrespective of agricultural pumping;
- In 2013, the NCMA agencies pumped 1,423 AF out of a total allocation of 4,330 AFY, which equates to approximately 33% of the total allocation;
- Groundwater pumping in the NCMA area accounts for approximately 39% of total water use;
- Excessive pumping on the Mesa has created a landward gradient that eliminates the historic recharge volume of subsurface inflow into the NCMA (thereby reducing the yield of the aquifer), and creates conditions favorable to seawater intrusion in the NCMA and Nipomo Mesa Management Area; and
- Continued average water level values are below an established index and indicate a potential environment for increased risk of seawater intrusion.

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This last factor is important considering effects of any increased pumpage related to cutbacks in surface water deliveries (state water and Lopez surplus water) because the index level is similar to the level seen in 2008-2009 just prior to observing the elevated chloride concentrations in one of the sentry wells. Data analysis indicates there is a probable lag time before signatures of seawater intrusion would be observed after a period of several months of low water levels. A summary of the annual report from the consultant will be presented at the Council meeting.

The NCMA work program has evolved to increase and augment water sampling by the rehabilitation of wells, increased sampling locations, the addition of transducers, the coordination of data with the county sampling program and the Nipomo Mesa Management Area Technical Group. The work program for the 2014 NCMA Annual Report includes the scope of work for the monitoring and reporting program by Fugro Consultants and staff extension services by Water Systems Consulting (WSC). The work program for Fugro is substantially the same as that approved for 2013, with the additional analysis and monitoring included as recommended by the NCMA TG. WSC's scope of work for ongoing support services to the NCMA TG includes agency and contract coordination and administration, along with providing necessary technical analysis.

Additionally, the NCMA TG has helped secure successful grants to complete additional studies. Data that is being developed is intended to support an eventual groundwater model that is critically needed to both inform and enable prediction of groundwater conditions and facilitate better management and conjunctive use of the area's water resources. Grant efforts nearing completion include the Integrated Regional Water Management (IRWM) Planning Grants to improve the characterization of the NCMA and Nipomo Mesa Management Area (NMMA), portions of the Santa Maria Groundwater Basin, and a regional recycled water study.

One important step taken by the NCMA TG was to establish the early indicator for seawater intrusion based upon historical data and referred to as the "deep well index" that is described in the annual report. Additional data was collected on May 5, 2014 that showed that the value of the deep well index had been declining at an average daily rate of about 0.24 feet between mid-April and early May. The NCMA TG has directed consultants to continue an increased data download and analysis to better observe any potential indicators of seawater intrusion.

From a long-term perspective, what makes this an even more significant concern is the fact that the NCMA jurisdictions are only pumping approximately one-third of their entitlements. Therefore, decreasing groundwater levels not only provide a short-term issue, but brings into question whether current allocations of groundwater are realistic

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on a long-term basis when jurisdictions approach full use of their entitlements. The proposed groundwater model discussed further below will help address these concerns.

**NCMA Strategic Plan**

A key water supply planning and management activity started in late 2013 by the NCMA TG is the initiation of joint Strategic Planning efforts for the purpose of providing a framework for identifying common water resource planning goals and objectives and to establish a 10-year work plan for implementation of those efforts (Attachment 2). Several key objectives have been identified, including water supply reliability, increased outreach, and basin management. The mission statement is set forth below.

Preserve and enhance the sustainability of water supplies for the Northern Cities Area by:

- Enhancing supply reliability
- Protecting water quality
- Maintaining cost-effective water supplies
- Advancing the legacy of cooperative water resources management

Several strategic initiatives were developed, prioritized, ranked and ultimately included in an implementation plan and proposed budget. Key efforts include:

- Intertie Plan and Inter-agency Mutual Aid requirements – this effort includes developing an intertie model and evaluating upgrades to connect pipes and develop pipe capacity to deliver water between agencies as well as necessary mutual aid agreements in order to protect against vulnerabilities due to drought or loss of specific water supplies.
- Water Shortage Contingency Plan - this effort includes coordinating urban water management plans for the northern cities and developing a coordinated plan of action to respond to a severe shortage condition within the NCMA.
- Salt and Nutrient Management Plan –this study will shortly be required by the State and will provide data for the development of a groundwater model. The current grant study nearing completion (the Santa Maria Ground Water Basin Characterization) will inform this plan.
- Groundwater Model – this will allow simulation and prediction of aquifer condition and improve the understanding of the movement of groundwater within the basin. The model would also be necessary to determine the potential benefit of various water supply enhancement projects and management strategies. Ultimately, this is the pivotal tool to allow the agencies to identify the most effective strategy for enhancing the conjunctive use of the basin and improving the water supply reliability for the region.
- Recycled Water Supplemental Supply – this will allow the NCMA agencies to put their wastewater supplies to beneficial use. Through use of the groundwater model, alternative strategies for the implementation of recycled water (e.g.

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landscape irrigation, groundwater recharge, seawater intrusion barrier, and/or agricultural irrigation, etc.) can be analyzed to identify the most cost effective strategy for utilizing recycled water to develop a drought proof supplemental supply.

Water Emergency Plan

Staff is confident that the proposed measures present the most feasible and cost effective approach to meeting the City's long-term water needs based upon current projections and water sources. This includes the ability to accommodate normal drought cycles. In addition, efforts proposed by the NCMA will ensure the groundwater table is managed in the most responsible manner in order to best prevent damage to the viability of this water supply. However, any type of project to substantially protect the City's groundwater supply on a permanent basis will realistically take at least 10 years in a best case scenario, will be costly, and may ultimately be determined to be infeasible. In addition, the recommendations do not achieve a buffer in the future projected supply as was previously included in the former water supply strategy goals established. **Therefore, it is important to recognize that these recommendations do not provide the diversification of water supply necessary to easily withstand an unanticipated extended drought.**

The City permanently implemented mandatory conservation measures that were formerly identified as a first and second stage of measures. This leaves only the option of implementing Critical Water Supply Condition measures, which are enacted when usage meets 100% of supply. As such, the City does not have the options necessary to implement escalating measures in response to an impending water crisis. In addition, the current declaration is based simply on water use as a percentage of supply. It does not address complex decisions that may be necessary involving the level of pumping that would be authorized if evidence of seawater intrusion were to occur.

As a result, it is recommended that staff develop recommendations for an enhanced water emergency plan that can be implemented during a water emergency that may occur as a result of an extended drought. The purpose of the plan would be to provide measures that could be implemented on a phased basis as an emergency worsened, establish policy direction on how to respond to water supply management decisions during a severe extended drought, and to determine the practical steps that would be necessary to implement emergency measures when necessary. It is anticipated that the plan will be implemented through an ordinance that will include steps required when vulnerabilities in any City water supplies appear imminent. This plan would be developed in coordination with the NCMA Intertie Plan, Inter-agency Mutual Aid requirements and Water Shortage Contingency Plan. It will be important to develop this plan over the next few months because another drought year could begin to trigger water emergency conditions.



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City and Regional Coordination

Consistent with the Urban Water Management Planning Act, the California Department of Water Resources (DWR) Drought Planning Guidance and the City's Urban Water Management Plan, staff is recommending establishment of a Water Shortage Response Team (WSRT) for the purposes of water shortage contingency planning. Contingency planning before a shortage allows selection of appropriate responses consistent with the varying severity of shortages. The City's WSRT is recommended to consist of the Community Development Director, Public Works Director, Administrative Services Director, Water Utilities Supervisor, and the Associate Planner/Water Conservation Coordinator.

Regional coordination is central to protection of regional supplies, including the groundwater basin, surface water and ultimately to developing recycled water. It is recommended that a joint workshop with other jurisdictions and agricultural members be scheduled in the Fall. Ultimately, to meet State guidelines, a Regional Drought Task Force should also be established to include representatives from each agency.

**ALTERNATIVES:**

The following alternatives are provided for the Council's consideration:

1. Approve staff's recommendations;
2. Modify the proposed measures and/or targets and direct staff to proceed;
3. Develop more mandatory measures to reduce costs of incentives;
4. Pursue State Water purchase;
5. Pursue permanent purchase of water supply from OCSD or other jurisdictions;
6. Implement a drought surcharge per the State Water Code; or
7. Provide staff other direction.

**ADVANTAGES:**

Conservation efforts are the most cost effective option to address water needs and are within the City's control to proceed. The proposed NCMA studies are designed to protect the groundwater supply and ensure the City will have access to its full allocation in the future of this water resource. Recommendations provide a feasible alternative to meet both demand and State requirements. Lastly, these initial steps can be fully funded without rate increases.

**DISADVANTAGES:**

The recommendations will result in a significant cost. In addition, a recycled water strategy will require future costs likely to trigger significant rate increases and will depend on cooperation of neighboring jurisdictions. The recommendations will likely not address demand during an extended drought period within the next ten year period. Lastly, by approving the agreement and amended agreement, the City will need to pay

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its share of the cost, which is approximately 31% according to the Arroyo Grande Groundwater Basin Management Agreement.

**ENVIRONMENTAL REVIEW:**

No environmental review is required for this item.

**PUBLIC NOTIFICATION AND COMMENTS:**

The Agenda was posted in front of City Hall on Thursday, June 5, 2014. The Agenda and staff report were posted on the City's website on Friday, June 6, 2014. No public comments were received.

**Attachments:**

1. NCMA 2013 Annual Report
2. NCMA Strategic Plan